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ABSTRACT

The document presents a new set of standards for family and consumer sciences (FACS) education. Section 1 is a three-chapter overview. Chapter 1 addresses the rationale for change and the FACS vision and mission. Chapter 2 describes the approach to develop the national standards, FACS format, and components of the standards. Chapter 3 provides background information on the process for FACS national standards, explains the structure of the process questions, and presents the reasoning for action standard. Chapter 4 presents the 16 areas of study, along with their comprehensive standards, content standards, competencies, academic proficiencies, and process questions; career, community, and family connections; consumer and family resources; consumer services; early childhood, education, and services; facilities management and maintenance; family; family and community services; food production and services; food science, dietetics, and nutrition; hospitality, tourism, and recreation; housing, interiors, and furnishings; human development; interpersonal relationships; nutrition and wellness; parenting; and textiles and apparel. Chapter 5 discusses aspects of implementation strategies and potential leadership activities to guide state development of standards and related programs. Appendixes contain 118 references grouped by contributing state; 110 process references and additional resources; and a participant list.

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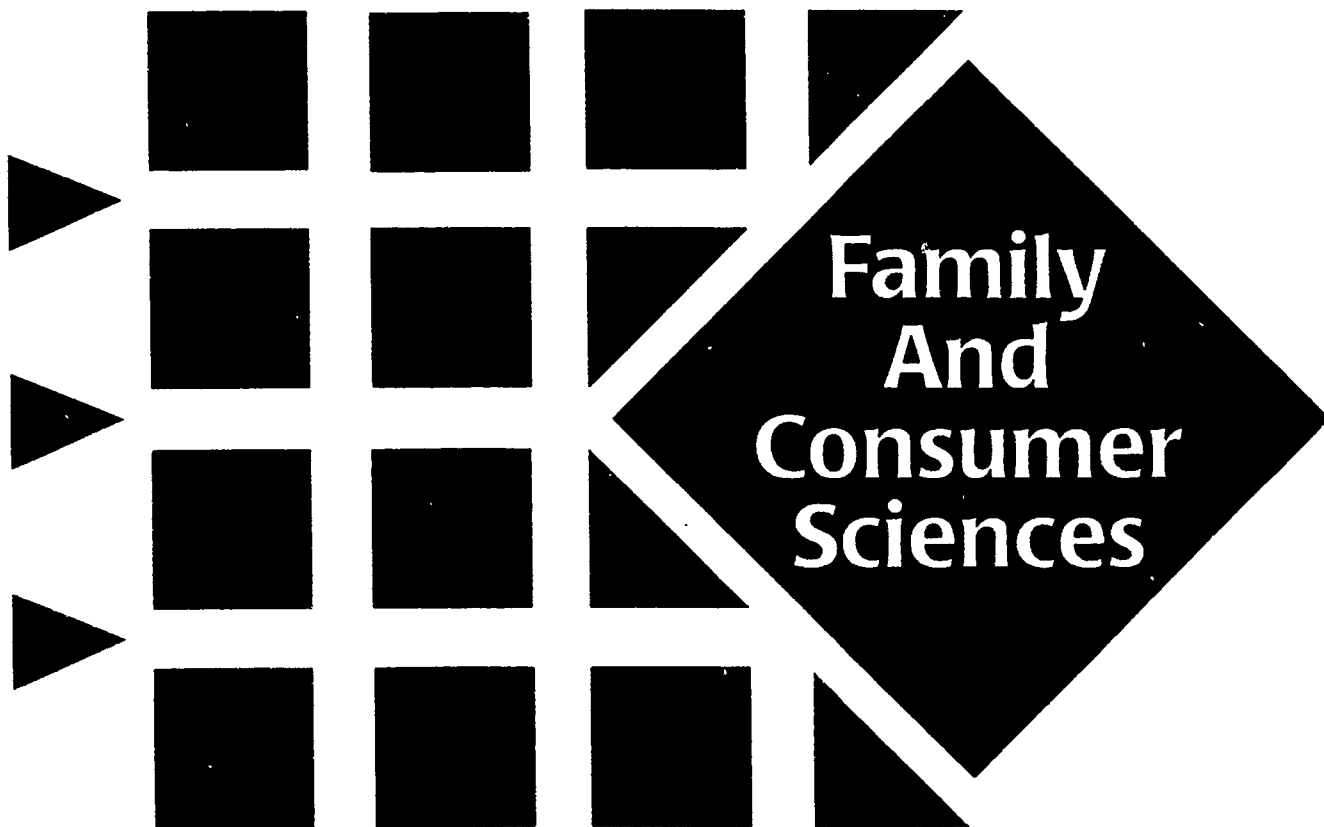
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National Standards

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NATIONAL STANDARDS for Family and Consumer Sciences Education

Developed by
**National Association of State Administrators
for Family and Consumer Sciences (NASAFACS)**

in Partnership with
**Vocational-Technical Education Consortium of States
(V-TECS)
Southern Association of Colleges and Schools**

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FOREWORD

What will the future offer? Will Family and Consumer Sciences Education (FACS) contribute significantly to assisting individuals and families in their deliberations and activities in the future? Will Family and Consumer Sciences Education take the challenge to be a leader in the change processes for education and the community?

Will the discipline be a leader in integrating its knowledge, skills, and reasoning processes with other disciplines and external groups?

Family and Consumer Sciences has roots in both academic and vocational-technical education and easily reaches beyond the education system into the community as it focuses on the needs of individuals and families. FACS can provide the bridges needed to deal with many major societal issues. Our society is most concerned today with the issues of work and family, environment, health care, crime, child and elder care, global politics and economy, and technology usage.

Will FACS bring together groups of educators to address how to integrate academic and FACS content, using the reasoning processes related to real-life situations to enhance the ways students will learn to cope with the future? Will major issues related to the environment, global politics and economy, and technology become the basis for the courses, using content from both FACS and other content areas as the means to assist with potential problem-solving?

Will Family and Consumer Sciences Education take the leadership to cause this change to happen?

Family and Consumer Sciences Education can take the leadership in bringing together decision-makers, community leaders, and family members to discuss these issues and recommend actions to enhance living in the future. Work and family connections, management, and intergenerational activities are key concerns of the family and business today. FACS Education can be the catalyst to bring these issues into action-oriented education programs.

New programs to address the needs of families can be created, not only at the secondary or elementary level, but also by expanding beyond the walls of education into the community. Here, multi-generational programs and multi-agency programs may provide a new breed of education that meets

the community halfway. Education is an institution of society to prepare people for the roles of living. When programs serve community needs and educate youth and adults, both society and the institution of education successfully move forward into the future.

The Family and Consumer Sciences Education National Standards provide the platform for the discipline to move into a new era. The standards provide a tangible means of communication to be used with other areas of education, community representatives, business and industry, family members, and agencies, in assisting with solving problems and providing a foundation for the future of families and communities.

Participation by states is a crucial part of the process. As William Weisgerber, Chairman of the FACS Education National Standards Advisory Committee, commented about the standards, "It always breeds fear in me when I purchase an item only to see on the package, 'needs some assembly,' and the directions seem to fail to explain the steps!"

The directions for the package of FACS Education National Standards are not clearly defined, as states will need to determine how they will use them. This leaves open to speculation how well the national standards will lead the discipline to meet the needs of a changing society in the future. Alone, it is indeed the package that still "needs some assembly," but with leadership, the package will be a beacon that can shine brightly into the future, and the energy source will be Family and Consumer Sciences Education in each state. So the question remains:

Will Family and Consumer Sciences lead educators, decision-makers, and community leaders to make this a priority area not only within the walls of education, but beyond, in the community, where it really counts?

Barbara Border
Project Director
National Standards for
Family and Consumer Sciences Education

PREFACE

In May, 1995, the National Association of State Administrators for Family and Consumer Sciences Education (NASAFACS), an affiliate of the Family and Consumer Sciences Education (FACS) Division of the American Vocational Association, began to explore how best to provide a strong and clear conceptualization and a common direction for Family and Consumer Sciences Education at the national, state, and local levels. In May, 1996, they initiated a project to develop national standards, with financial support from funds contributed by Family and Consumer Sciences Education units in many states, from state and local associations and foundations, and from corporate supporters.

A highly participatory process was utilized from the first, with the collection of standards-related materials from every state that wished to submit them, and from other disciplines that had relevant materials. FACS educators from all states had the opportunity to help revise the initial compendium developed from state standards, and feedback was received from an Advisory Council of more than thirty representatives of leadership from FACS, external organizations, business and industry, agencies with direct connections, and others.

In June and July, 1997, Family and Consumer Sciences Education professionals and others with expertise in specific areas of FACS, including representatives from business and industry, convened in Park City, Utah. Though work of the panels continued through late fall, it was the 1997 Park City Meetings that defined the "historic moment" for the direction the National Standards were to take. Much like the participants of the Lake Placid Conferences, whose labors in the early 1900's established home economics as the force for families throughout the twentieth century, the participants in the 1997 Park City Meetings struggled with how to develop National Standards that would best represent the ability of Family and Consumer Sciences Education to lead educational endeavors into the twenty-first century. Their reconfirmation of the Vision and Mission for Family and Consumer Sciences Education as the basis for National Standards established the ambitious nature of their goal. They used a format that highlights the correlation and alignment of competencies, process questions, and academic proficiencies in a national FACS document for the first time. The Park City Meetings and subsequent development created a format for the National Standards that celebrates the variety that exists among state philosophies and blends multiple approaches to standards and educational delivery systems. The resulting work, even in early draft form, has become a powerful tool for showcasing the movement from

home economics, with an emphasis on technical homemaking skills, to Family and Consumer Sciences Education, with its focus on broader family and society issues, and provides significant new direction for the field.

The final version of National Standards for Family and Consumer Sciences Education was presented in May, 1998, in Indianapolis, Indiana, at the Assembly of States, a nationwide meeting of teams of FACS educators from each state. The National Standards will be disseminated to teachers, school administrators and curriculum developers, teacher educators, practicing professionals in family and consumer sciences, and all other interested parties, and will be reported on and marketed to a wide audience. We believe these National Standards will greatly assist in preparing students for family life, work life, and careers in Family and Consumer Sciences by empowering individuals and families across the life span to manage the challenges of living and working in a diverse global society.

Peggy Wild
Chairperson, Management Team
National Standards for
Family and Consumer Sciences Education

ACKNOWLEDGMENTS

The Family and Consumer Sciences Education National Standards Project is the result of a spirited collaboration involving hundreds of people and organizations, representing all aspects of the industry. Educators (teachers and administrators), professionals (technical workers, supervisors, managers), and government officials have contributed to the process. We have included in this document the names of those who have participated most actively—serving on teams, committees, developmental panels, and focus groups; or assisting as technical advisors, editors, writers, reviewers, and support personnel. The majority of the project participants are listed in the Appendix, but there are some who have given so magnanimously of their time, talent, and efforts that we wish to acknowledge them with special thanks here.

We want to especially thank the 31 states that contributed funding for this project. Without the support of the State Departments of Education and Vocational-Technical Education Departments and Divisions, this project would not have been possible.

The members of our Management Team have contributed generously, guiding the project and giving us information and insights from their varied perspectives. They have advised on project development and have extensively edited the project contents. Particular thanks go to **Peggy Wild**, Management Team Chair, for her leadership and assistance; to **Judy Hetherly** for her activities as liaison, contacting and coordinating people; and to **Sharron Glasscock** and the Virginia teachers for the process column. Thanks team!

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Our Advisory Council, chaired by **William Weisgerber**, provided insightful feedback on the project and helped us continue working toward our goals. We thank them for their continued support and assistance.

Trade and industry associations gladly provided us with materials to review and add into the standards. FACS State Administrators all across the country contributed materials for which we are most grateful. They also provided valuable input and thorough reviews following the project's various stages. Thanks go to the developmental panels for initiating, organizing, and defining the project tasks, and for investing considerable time and effort toward their completion. Also, participants in the numerous focus groups deserve our gratitude for substantial contributions to the content. All members of these groups, as well as individuals who wrote process or submitted reviews, are named in the Appendix.

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We look forward to continued work with many of these people in the implementation of FACS Education National Standards and the development of programs that promote well-being and empowerment for the citizens of the future.

Finally, we want to thank the support personnel who have provided basic necessities for this production. Thanks go to **Marcia Losh**, at Education Leadership Consultants, for her research assistance and support services. The secretarial and computer skills of **Mary Harrison** and **Phyllis Lafferty** were greatly appreciated. For the extensive formatting and text entry work and the vast administrative duties performed by **Sandi Davison**, V-TECS, we are eternally grateful. Many thanks go to **Debra McKinion** for her diligent work on the final text editing. The determination and endurance of a cooperative, dedicated, and sustaining team brought this project to a productive and worthy conclusion. Thank you, all.

Barbara Border
Project Director

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Executive Director, V-TECS



Section I

OVERVIEW

Chapter 1

Family and Consumer Sciences Education: Moving Into The Future

Rationale for Change

Change and reform movements in education are helping create new visions of the highest possible academic goals for this country's students. Education reform reflects the concerns of society and of spiritual, political, governmental, education, and business leaders for the future of the country and its citizens as they operate in a high-technology global economy. Educational excellence in the traditional content areas may not be sufficient to secure the future of individuals and families and the competitiveness of the country. There is widespread agreement that essential preparation for success includes acquisition of problem-solving, decision-making, critical thinking, communication, literacy, and numerical skills in applied contexts. Today's students are the future leaders and members of tomorrow's families, workplaces, and communities. They need to be able to act responsibly and productively, to synthesize knowledge from multiple sources, to work cooperatively, and to apply the highest standards in all aspects of their lives. These factors call for a new set of standards for Family and Consumer Sciences (FACS) Education.

Families play a very important role in our individual lives and in society. The importance of the family is widely recognized as the context in which family members learn about relating to and caring for others. In families, individuals acquire attitudes about learning and work, build communication and reasoning skills, learn right from wrong, and form patterns of responsible citizenship. Family members learn to work together within the family and with other families to improve conditions in the home, workplace, community, and world.

The process to develop standards for Family and Consumer Sciences Education has occurred concurrently with the development of standards in several other areas of education. The emphasis on education in the 1980's led to the National Governors Association's articulation of national educational goals in 1990 and the subsequent endorsement of those goals by the Bush Administration. In 1992, President Clinton embraced the goals, and Congress passed the Goals 2000: Educate America Act,

which codified educational goals and sanctioned the development of national educational standards as a means of encouraging and evaluating student achievement. This legislation also provided for voluntary skill standards related to business and industry clusters to encourage youth and adults to be better prepared with high-level skills and updated technological requirements. Standards development that has occurred since then has focused on higher standards for all students, and has identified what learners should know and be able to do in discipline-specific content and in thinking and process arenas as well.

Vision and Mission—A Foundation for FACS Standards

The foundation for the development of the national standards was laid in March, 1992, when vision and mission statements for Family and Consumer Sciences Education were developed by FACS administrators, educators, and others during a strategic planning session in Washington, DC.

Vision

Family and Consumer Sciences Education empowers individuals and families across the life span to manage the challenges of living and working in a diverse global society. Our unique focus is on families, work, and their interrelationships.

Mission

The mission of Family and Consumer Sciences Education is to prepare students for family life, work life, and careers in Family and Consumer Sciences by providing opportunities to develop the knowledge, skills, attitudes, and behaviors needed for:

- Strengthening the well-being of individuals and families across the life span.
- Becoming responsible citizens and leaders in family, community, and work settings.
- Promoting optimal nutrition and wellness across the life span.
- Managing resources to meet the material needs of individuals and families.
- Balancing personal, home, family, and work lives.
- Using critical and creative thinking skills to address problems in diverse family, community, and work environments.
- Successful life management, employment, and career development.
- Functioning effectively as providers and consumers of goods and services.
- Appreciating human worth and accepting responsibility for one's actions and success in family and work life.

The vision and mission statements have been widely publicized and utilized since that time, and have made significant impact on the directions taken by Family and Consumer Sciences Education curriculum and program development at the national, state, and local levels.

During that same period, the broader Family and Consumer Sciences profession was engaged in extensive self-exploration and examination of the philosophical base underlying home economics. In October, 1993, leaders from the many segments of the FACS profession convened in Scottsdale, Arizona, to explore and redefine future directions for the field. It was at that meeting that the name Family and Consumer Sciences was widely agreed upon as best depicting the profession's shifts from emphasis on technical homemaking skills to strong focus on broader family and society issues. In 1994, the national professional organizations adopted new names: the American Association of Family and Consumer Sciences (AAFCS), the Family and Consumer Sciences Education (FACS) Division of AVA, and the Family and Consumer Sciences Education Association (FCSEA). The definitions and directions developed in Scottsdale were in harmony with the vision and mission statements that had been developed for Family and Consumer Sciences Education, and the work was merged. The modified vision and mission statements were officially adopted by the FACS Division of AVA in December, 1994.

Initiating the Development of Standards

In May, 1995, the membership of the National Association of State Administrators for Family & Consumer Sciences Education (NASAFACS), an affiliate of the FACS Division of AVA, moved the profession forward by deciding that states would work together to develop national standards. They recognized the need for a set of curriculum standards that would organize the subject matter and processes of Family and Consumer Sciences Education in a way that would provide a strong and clear conceptualization of the field and help establish a common direction for development at the national, state, and local levels. They were determined that the project would be structured in a way that would promote full participation of representatives of parents, students, business and industry, FACS educators, and FACS and vocational administrators. Further, they determined to seek funding for a grassroots effort for developing the standards. Financial support for this project came from funds contributed by Family and Consumer Sciences Education units in many states, from state and local associations and foundations, and from corporate supporters.

Developing the National Standards

In May, 1996, the NASAFACS membership designed a framework for organizing FACS content into categories for which standards would be developed. In October, 1996, the Vocational-Technical Education Consortium of States (V-TECS) initiated project activities, and a management team was appointed by NASAFACS to oversee the project.

Materials related to Family and Consumer Sciences Education standards were collected from every state that had current materials and wished to submit them, and from other disciplines that had relevant materials. A format for the standards was adopted in March, 1997, based on research and states' directions. An initial compendium of state standards was presented at the NASAFACS Annual Meeting in May, 1997. An advisory council of more than 30 representatives of leadership from FACS and related organizations, business and industry representatives, agencies with direct connections, and others met and provided input in meetings conducted three times during the project.

A group of Family and Consumer Sciences Education professionals and others with expertise in specific areas of FACS, including representatives from business and industry, convened in Park City, Utah, in June and July, 1997. They delineated comprehensive standard statements for the 16 categories of Family and Consumer Sciences Education content and for the reasoning process. Work of the panels continued through late fall, 1997. Two additional meetings (one in Richmond, Virginia, and one in Atlanta, Georgia) and additional small group and individual work were devoted to developing the process materials.

Regional and state focus group meetings were convened throughout 1997 in Portland, Oregon; Chicago, Illinois; New York, New York; Los Angeles, California; Butte, Montana; Detroit, Michigan; Phoenix, Arizona; and Columbus, Ohio, to review draft sets of standards. These groups provided valuable feedback about the initial drafts. Focus group members included FACS teachers, teacher educators, state administrators, and business and industry representatives. In addition, states had the opportunity to provide feedback at three points in the development process. Further feedback was solicited in spring, 1998, by mailing a draft of the standards to FACS professionals and others who had not participated in previous phases of the project.

The Nature of the FACS National Standards

The National Standards for Family and Consumer Sciences Education present a vision for the future and provide FACS educators with a structure for identifying what learners should be able to do. The FACS National Standards are based on knowledge and skills needed for home and family life as well as those needed to succeed in related careers. The national standards provide an excellent system for meeting the needs of individuals preparing for life in a global society while simultaneously preparing for careers. The national standards are comprehensive, designed to encompass the variety that exists among state philosophies and to accommodate various approaches to standards and educational delivery systems.

Viewed collectively, the national standards provide the structure for an integrated approach to Family and Consumer Sciences Education. Educational standards have been or are being developed in many of the individual career areas within Family and Consumer Sciences Education (for example: dietetics, early childhood, facilities maintenance, food service, hospitality, interior design, and so forth), so it is necessary to clarify the roles of these various sets of standards. The FACS National Standards address expectations for overall FACS programs and curriculum design, while the standards for individual FACS career areas provide focused and enhanced content detail and additional levels for specific career paths. Educators are encouraged to first establish their overall FACS program frameworks using the FACS National Standards as a guide, and then to use the standards for specific career areas to guide the development of specific career-related courses of study.

Adaptability and accessibility are important elements of the national standards. There is wide variation in what, how much, and when concepts in Family and Consumer Sciences Education are introduced to students, and in the level of depth to which any particular standard or competency may be developed. The national standards apply to all students, regardless of age, gender, cultural or ethnic background, disabilities, aspirations, interests, or motivations. Different students will achieve understanding in different ways and in different degrees of depth and breadth, depending on interest, ability, and context.

Chapter 2

Organization of the Document

The Family and Consumer Sciences Education Model

The Family and Consumer Sciences Education (FACS) model is designed to allow for all 16 areas of study to interact with processes, academic proficiencies, and FHA/HERO. The model is designed to show action and forward movement into the future. The model implies that individual and family, and occupational areas of study are an integrated group from which variations of programs and courses may be developed. As we move into the next century, new combinations of knowledge and skills will be required to meet the needs of individuals and families seeking to succeed in both work and family environments. *The model for Family and Consumer Sciences Education is displayed on the front cover of this book.*

The FACS National Standards Approach

The approach used to develop the Family and Consumer Sciences Education National Standards is described here according to the scope, procedure, voluntary nature, and funding sources.

Scope

Family and Consumer Sciences Education has both academic and occupational content; therefore, the scope of the standards is extensive. Family and individual areas of study serve as the foundation for all students. Occupational areas of study are based on family and individual areas, but serve the purpose of preparing for work. The divergent purposes of preparation for living and for work create standards that are structured for different end uses. The family and individual areas of study relate to academic competencies placed in a contextual setting related to essential living skills. The occupational standards are based on content in family and individual areas, but are placed in the context of related business and industry settings.

Procedure

The FACS National Standards were developed with state involvement. The research for the project focused on existing state standards and on state needs for the future. The standards are a compendium of voluntary state standards.

A second element of procedure focuses on flexibility for use of the standards. The FACS National Standards are a framework for states to use on a voluntary basis, according to their needs. This allows for states to utilize specific areas of study and individual standards that fit their philosophy.

A third part of procedure is the involvement of community stakeholders from related businesses and industries. This involvement took several forms throughout the project, including focus groups; developmental panels; and several reviews of standards by state groups, business and industry representatives, and others. Focus groups were held across the country, both in rural and urban areas. These groups addressed all areas of study, academic proficiencies, and process columns. In addition, two panels were formed to provide an opportunity for in-depth development of standards, competencies, and process questions. The consensus method of decision-making was used throughout these processes.

Voluntary Status

FACS National Standards were developed by states, as a group, under the leadership of the National Association of State Administrators for Family and Consumer Sciences Education in conjunction with the Vocational-Technical Education Consortium of States. Nearly all states participated in the process through several developmental activities. Business and industry groups also participated and offered standards related to specific occupational clusters.

Funding

Funds for this project were provided by state departments of education, state vocational-technical education, and by corporate sponsors. Thirty-one states and three corporations provided financial resources to support the project.

Summary

The philosophical base for the FACS National Standards was established to provide a voluntary set of standards with flexibility for state use. The project involved large numbers of FACS professionals, business and industry representatives, and others. These individuals participated in a variety of roles,

in both rural and urban areas across country. Above all, this is a set of national standards developed by states for their purposes and paid for primarily by state resources.

FACS Format

The Family and Consumer Sciences Education National Standards format is a comprehensive structure designed to accommodate varying state philosophies and multiple issues related to standards and delivery systems. The philosophies related to standards and curriculum include competency-based, conceptual, and process perspectives. FACS, like other disciplines, is concerned with the integration of academic knowledge and achievement in a contextual approach. The key to this approach is blending philosophies and issues related to education and society.

The FACS National Standards format components include areas of study, comprehensive standards, content standards, competencies, academic proficiencies, process questions, and scenarios. The components were established based on states' practices and their perceived needs. This format represents a blending of the philosophies and issues related to FACS, all education, and the nation.

Two major approaches are used by states to address standards: the competency approach and the critical science perspective, or process approach. The FACS National Standards format allows for both competencies and processes to relate to standards in a deliberate effort to link the two philosophies. Two other state and national issues of importance are contextual assessment and the relationship of content standards to academic proficiencies.

The FACS National Standards format is reflective of the results of 25 national business and industry and 10 national academic standards projects. Although these other national standards were developed by using various methods and formats, they have the common goal of providing leadership in setting the benchmarks needed for education to assist students in preparing for living and working in this country.

The 1996 National Education Summit and the National Education Goals Panel of 1990 set goals for the year 2000 to raise the level of academic proficiencies for all students and to increase their ability to apply academic knowledge to contextual situations in the workplace and the community. Similarly, the FACS National Standards format incorporates a column to illustrate crosswalked academic content in language arts, mathematics, and science.

Two publications identify concerns related to implementation: *Standards: Making Them Useful and Workable for the Education Enterprise* (Wills, 1997), and *United States Education Driven Skill Standards Systems* (Wills & Border, 1993). These publications articulate the need for measurement to be addressed in business and industry terms and community standards. Many national skill standards

projects identify related academic standards in such general terms that it is difficult to crosswalk the standards to specific academic proficiencies and measurements. Linear measurements were described, but contextual assessment strategies were not developed. Finally, these publications identify the absence of linkages for making use of national standards in a state context.

The FACS National Standards format has attempted to incorporate not only standards but also the components that assist in clarifying them. The components were selected based on states' practices and their perceived needs for the future. The format is designed to provide leadership for the development of Family and Consumer Sciences Education National Standards and the component parts that become the bridges for implementation.

Components of the Standards

The FACS National Standards components, include areas of study, comprehensive standards, content standards, competencies, academic proficiencies, process questions, and scenarios. Each component contributes to the total understanding and usefulness of the standards.

Areas of Study

For the purposes of developing national standards, Family and Consumer Sciences Education has been organized into 16 categories called areas of study:

- Career, Community, and Family Connections
- Consumer and Family Resources
- Consumer Services
- Early Childhood, Education, and Services
- Facilities Management and Maintenance
- Family
- Family and Community Services
- Food Production and Services
- Food Science, Dietetics, and Nutrition
- Hospitality, Tourism, and Recreation
- Housing, Interiors, and Furnishings
- Human Development
- Interpersonal Relationships
- Nutrition and Wellness
- Parenting
- Textiles and Apparel

Comprehensive Standards

Each area of study has a comprehensive standard that provides a broad description to assist individuals in understanding the content of the area. This standard is not designed for measurement, but to provide a general description and overall direction.

Content Standards

Content standards relate to what individuals need to know and be able to do, or what is expected of the learner. They are directly related to the body of knowledge, skills, and practices belonging to the FACS discipline. The verbs for content standards are written in an action and performance mode and represent high levels of desired learning in the cognitive and psychomotor domains. Cognitive domain verbs are associated with higher order thinking skills, while psychomotor domain verbs are related to performance. Bloom's taxonomy was used to define cognitive domain verbs, and Simpson's taxonomy was used as a reference for psychomotor verbs.

Competencies

Competencies further define the knowledge, skills, and practices of content standards and provide the basis for measurement criteria. They are composed of action verbs and the contents acted upon.

Similar to content standards, competencies contain verbs related to higher order thinking skills and performance, and are structured at the same level as those for the content standards. Verbs for the content standards establish the learning expectation levels that are reflected in the competencies. Competency verbs are expressed in terms that facilitate evaluation.

Academic Proficiencies

Academic proficiencies are language arts, mathematics, and science statements. Each statement is related to a FACS content standard.

The *V-TECS Basic Essential Skills Taxonomy* (V-TECS Snyder taxonomy), a nationally validated instrument for the purpose of crosswalking academic and other disciplines, has been utilized to establish the information in this column (V-TECS & Snyder, 1992).

The academic proficiencies were established and coded based on the V-TECS Snyder taxonomy and the *McREL Content Knowledge, A Compendium of Standards and Benchmarks for K-12 Education* (Kendall & Marzano, 1995). The V-TECS Snyder taxonomy provides a very detailed method of analyzing FACS content standards against specific academic content. The codes for the V-TECS

Snyder taxonomy are identified after each academic proficiency in non-bold type. The McREL statements are indicated after each academic proficiency statement in bold type.

Kendall and Marzano provide benchmarks against which FACS standards may be crosswalked with other national standards. The academic content of standards is determined with the use of multiple research tools, rather than by using only one instrument, because this provides the greatest degree of consistency and comprehensiveness in the process. Due to the volume of these materials, the V-TECS Snyder taxonomy and the *Content Knowledge* statements are available from V-TECS on computer disk.

Process Questions

Process questions are designed to guide students in engaging in thinking, reasoning, and reflecting on content as structured around contextual problems to be solved. They are related to each content standard. The process questions are designed to assist students in making meaningful interpretations and reflections related to the content standard. They are structured to reflect major processes which incorporate several subprocesses. The processes include thinking, communication, leadership, and management. Chapter Three discusses in depth process theory, the reason for action, and process questions development.

Scenarios

Scenarios are authentic life and work situations that place skills and knowledge in the context where the mastery of routine performance must be demonstrated, and a problem must be solved.

Students involved in authentic learning often outperform those who are involved in a more theoretical and abstract approach. Applied research was conducted to determine why and how students learn in authentic situations (Malyn-Smith & Leff, 1997). Learning in a laboratory is contextual, but not necessarily authentic, unless it duplicates a real-life situation. For example, learning knowledge and skills in the workplace is an authentic situation that accelerates the acquisition of academic and content knowledge and skills. In a current study being conducted by V-TECS and Indiana School-to-Work Linkages Project, data illustrates the need to couple assessment scenarios with traditional measurement evaluation to validate student attainment.

Although scenarios are not established for the FACS National Standards, they are envisioned as being important components of the format. Competencies, academic proficiencies, and process questions not only relate to standards, but also become the basis for the development of contextual assessment and instructional strategies in scenarios. Competencies and academic proficiencies provide the basis for measurement in the scenarios. Process questions provide both problem-solving and reasoning

elements for determining actions in the scenarios. Authentic situations from the workplace and the community provide the context. Assessment strategies, with scenario development as a new option, will be state-determined choices. Assistance in the development strategies for this component are included in Chapter 5.

Summary

The Family and Consumer Sciences Education model and format presented in this chapter have been fully developed. In Section II, you will find the 16 areas of study along with their comprehensive standards, content standards, competencies, academic proficiencies, and program questions. Assistance in development strategies for scenarios is found in Section III.

Chapter 3

Process for FACS National Standards

Introduction

Process has been addressed in the FACS National Standards Project in two ways: through reasoning for action, an overarching, process-oriented standard; and through process questions provided for the content standards in each of the 16 Family and Consumer Sciences areas of study. The purposes of this chapter are to provide background information on process, to explain the structure of the process questions, and to present the reasoning for action standard.

Importance of Process

Process is a vehicle for obtaining, analyzing, and using content. Costa and Liebmann (1997) describe processes as the “how” of learning while content is the “what.” The emphasis on process within FACS National Standards is grounded in needs and issues of society and in developments in Family and Consumer Sciences Education.

The importance placed on process does not in any way imply that all Family and Consumer Sciences Education programs are expected to pursue a single approach to teaching reasoning or any of the other processes. Just as there are many different facets to process, there are many different strategies that FACS educators could use to help their students develop the understandings and abilities established as standards and goals for their own programs.

Needs and Issues of Society

Vocational educators and other trend watchers predict that over their lifetimes, today's students will work in several career areas and hold a multitude of different jobs, several of which may not yet be invented. Given the certainty of future change, today's students are best served by education which

causes them to recognize and develop their own abilities to identify problems, to locate and synthesize information, and to work with others to create solutions (Delisle, 1997; Costa & Liebmann, 1997).

The need for process in education was emphasized in the 1991 report of the Secretary's Commission on Achieving Necessary Skills (SCANS). Based on information gathered from businesses and industries across the country, the SCANS determined that process-oriented foundations and competencies are "at least as important as technical expertise . . . The competencies represent the attributes that today's high-performance employer seeks in tomorrow's employee" (U.S. Department of Labor, 1991, p. xvi). The SCANS foundations and competencies harmonize closely with processes needed for and developed through Family and Consumer Sciences Education.

Developments in Family and Consumer Sciences Education

Fox (in press) explains that the ground work for the current shift in emphasis to a process from a technical approach was established several years ago with the publication of *Home Economics: A Definition* (Brown & Paolucci, 1979). The authors described the issues families face as "practical problems," or value-based questions about what actions individuals and families should take in addressing the concerns they face over time. Central to the practical problems approach is that participants (students) identify the problems families face and the participants themselves ultimately determine what they need to know and which actions to take. The practical problems approach essentially inverts traditional approaches to education by beginning with questions, emphasizing examination of valued ends and alternative means for accomplishing them, and addressing only the particular information and skills needed to identify and take the selected actions.

In the practical problems approach, the uniqueness of the knowledge base or curriculum content does not come from the uniqueness of the concepts, but rather from the questions themselves. From a practical problems perspective, content develops in response to the questioning. It is important to start with issues in which students have some knowledge and then make new knowledge available to them as interests and concerns increase. Using this approach, content fits when it becomes time to practice process, and when students are able to find answers to their own relevant questions (Rhode Island Department of Elementary and Secondary Education, 1997; Redick, 1995; Stone, 1993).

A number of recent Family and Consumer Sciences Education curriculum initiatives reflect the practical problems approach, with an emphasis on integrating process and content. This emphasis is apparent in Family and Consumer Sciences Education curriculum in at least 13 states, based on information provided to the national standards project. Further information about curriculum materials is available in the references section.

Framework for Process Questions

During the Park City Meetings, it was decided that a definite structure was required to provide a basis for the development of the process questions that address the practical problems approach. An extensive list of processes that students would ideally learn and utilize within their study of FACS were identified by the participants at the meeting.

Organizing Processes

Most processes related to Family and Consumer Sciences can be categorized into four organizing processes: thinking, communication, leadership, and management. While it is recognized that some of the plethora of processes that could be dealt with in the FACS curriculum could fall outside of these four organizers, or that specific definitions could make for an uncomfortable fit, it was widely agreed that these four would be used for the project in order to create a manageable structure for the development of process questions for the national standards. Brief explanations of the four organizing processes follow.

Thinking

Thinking processes encompass complex, multifaceted activities of the mind. The process area of "thinking" in the FACS National Standards emphasizes "directed" thinking or "the use of cognitive skills or strategies that increase the probability of a desirable outcome. It is purposeful, reasonable, and goal-directed . . . when the thinker is using skills that are thoughtful and effective for the particular context and type of thinking" (Halpern, 1996, p.5). It is compared to nondirected thinking, a human tendency for routine patterns of thinking, that makes us susceptible to hasty, fuzzy, narrow, or sprawling thinking (Perkins, 1995).

Way (1987) describes three major components of purposeful, directed thinking, including an extensive and accessible knowledge base, multiple cognitive skills, and disposition to think productively and critically. Cognitive skills are further divided into two types: analytical processes such as classifying, comparing and contrasting, distinguishing between fact and opinion, generating and testing hypotheses, and recognizing and applying inductive and deductive reasoning; and executive or metacognitive processes such as planning, representation, and self-monitoring. These analytical and executive thinking processes are similar to the "Habits of Mind" advocated by Marzano (1992).

Two major but distinct types of thinking processes are critical thinking and creative thinking. Critical thinking emphasizes examination and critique of printed and spoken language in order to gain insight into meanings and interpretations. Critical thinking involves systematic, purposeful analysis of explanations and arguments in order to identify premises and conclusions; to distinguish among opinion, reasoned judgment, and fact; and to recognize underlying assumptions, biases, and values (Wisconsin, 1987). Creative thinking, in contrast, is the use of innovative, exploratory approaches to generate ideas. In creative thinking, unusual ideas are valued, and perspectives and explanations other than those which are immediately apparent are sought (Halpern, 1996).

A key belief related to thinking processes is that they can be learned, and therefore, can and should be purposefully addressed in instructional settings (Halpern, 1996; Laster, 1987; Marzano, 1992; Perkins, 1995; Sternberg, 1996). Marzano (1992) states that not only must thinking processes be overtly taught and reinforced, they must also be introduced and then reinforced in context. The "practical problems approach" for Family and Consumer Sciences Education is well-suited to this type of explicit attention to the thinking processes identified above (see Laster & Thomas, 1997; Thomas, 1987).

Communication

Communication is the transmission or interchange of thoughts, feelings, opinions, and information between a sender and a receiver. Communication processes include speaking, listening, writing, and reading. Speaking also involves matching verbal messages with appropriate nonverbal communication, while writing involves creating and formatting various types of printed documents. Word usage, fluency, and structure are technical processes used in speaking and writing. Sensitivity to others, insight into individual differences, and ability to adjust communication to the audience are important interpretive processes. Listening and reading are processes for receiving messages. For instance, effective listening includes good eye contact, asking questions to clarify what the speaker is saying, and regularly sharing, through paraphrased feedback, an understanding of what the speaker has said. Effective reading, on the other hand, includes more individualized interaction with the text.

Communication processes are first experienced and learned within the social environment of the family. The process of learning to be an effective communicator begins in infancy, with babies and care givers engaging in interactive behaviors such as playing, cooing, smiling, and fussing or comforting. As communication learning continues, parents and siblings play a critical part in expanding a child's communication repertoire, exposing the child to unique expressions of verbal and nonverbal language, and engaging the child in conversations as a communication partner.

Communication processes build a sense of cohesiveness within groups. They are a powerful cultural tool, a means for creating a sense of group identity through exchange of values, expectations, and ways of thinking and perceiving. Communication also is important for managing conflicts. Effective communication includes accepting, rather than denying or avoiding, differences while trying to identify common ground. Conflict management is facilitated when individuals are able to express their own ideas and assert their own views effectively, while at the same time listening to and respecting the views of others (adapted from Ohio Department of Education, 1995).

Leadership

Leadership processes include helping a group, such as a family, shape a vision of purpose and goals, and encouraging others to commit and recommit themselves to accomplishing that vision. Leaders use many types of processes. They work with others in establishing a shared dream or goal, and in using that dream or goal to guide actions. They relate well to other group members in that they listen, empathize, and consider others' perspectives before taking action. Leaders tell, sell, participate, and delegate, using different strategies at different times and with different group members in order to involve and encourage everyone toward achieving the shared vision.

Shared, participatory leadership incorporates involvement, cooperation, and negotiation among all group members (Woyach, 1991). It means that everyone in the group can contribute leadership skills and that each group member is encouraged to help make decisions and to take action. Shared leadership results in empowered, interdependent relationships among group members. Shared leadership is closely related to responsible citizenship in a democratic society. Being a responsible citizen requires taking action for the common good of the group. Responsible citizens are concerned about the well-being of all society members and take social action to meet those needs.

Similarly, being a responsible family member requires taking action for the common good of the family as a whole, as well as, for the good of individuals. Leadership is enacted in families as members develop a common vision, relate and cooperate with each other, and assume shared responsibility for each other, their home, and their neighborhood (adapted from Ohio Department of Education, 1995).

Management

Management processes are used to carry out actions in order to meet individual and family needs. Management processes include setting goals, planning, implementing, evaluating, problem-solving, and decision-making. The complexity of management processes varies with the situation. In some cases, goals are clearly established, a choice has been made from among acceptable alternatives, and means

for accomplishing the goal are clearly or narrowly defined. In these situations, management is primarily a technical, action-oriented process used to select strategies and resources for reaching the established goal. It involves determining the short-term or intermediate goals that can be realistically accomplished, planning the steps to take and resources to use, carrying out the plan in an efficient and cost effective way, and evaluating the implementation process and the result.

Other cases are more complex. If goals are not clearly established, management processes would include examination of values, perspectives, and concerns. Reasoning processes would be used to identify alternative actions and consider consequences of various alternatives. Once acceptable alternatives are identified, decision-making processes would be used to examine, evaluate, and select one option based on current preferences and resources.

The multiple layers of management processes described above are used simultaneously and interactively to address personal and family issues. In addition, each of these incorporate other organizing processes in varying ways. For instance, critical thinking processes such as assessing information accurately, judging the viability of alternatives, and making a decision, are integral to many management situations. Creative thinking processes such as imagining consequences, conceptualizing alternatives, and empathizing with others are also important. Furthermore, when management processes are carried out in families and other groups, communication and leadership are needed as well. Thus, all four organizing processes are used in taking action to meet individual and family needs, and all will be integrated in process-based Family and Consumer Sciences Education (derived from American Home Economics Association, 1989; Indiana Department of Education, 1997; Ohio Department of Education, 1995).

Types of Action

As the group worked with these four organizing processes, they recognized the need for questions that would help students take a variety of types of action within each process. Specifically, they identified the need for students to take three types of actions: technical, interpretive, and reflective. The integration of content and process in a practical problems approach involves all three types of action. It is important to remember that these actions are not used separately or in isolation. Rather, they are collaborative, interrelated actions which in actual practice are used to support, strengthen, and enable one another. Brief explanations are given below for each type of action. References used to develop these explanations include American Home Economics Association (1989), Brown (1980, 1981), Brown & Paolucci (1979), Fox (1997), Fox (in press), Hultgren & Wilcosz (1986), Indiana Department of Education (1997), Kowalczyk, Neels, & Sholl (1990), Laster (1997), Maryland State Department of

Education (1989), Morgaine (1992), Ohio Department of Education (1997), Wisconsin Department of Public Instruction (1997), and Wogensen (1989).

Technical Action

Technical action emphasizes knowledge, facts, and manipulative skills. Technical action includes activities such as planning a day's menu based on the Food Guide Pyramid, describing typical characteristics of a two-year-old, explaining the steps in a planning process, preparing a given recipe, or sewing on a button. Textbooks, lectures, demonstrations, and laboratory activities typically build technical knowledge and skills.

Technical action is essential for successful personal and family life and for all types of careers. There are certain things individuals and families need to know and be able to do. But how can we decide which knowledge and skills are needed? How do we gain and consider perspectives broader than our own? This is where interpretive and reflective actions come in, to support, strengthen, and guide technical actions.

Interpretive Action

Interpretive action emphasizes interacting with other people through written and spoken words. Interpretive action is used to develop mutual understanding; shared meanings; and interpretations of values, means, and goals. We are involved in interpretive actions when we share ideas and when we seek to understand how other people view issues and problems we are trying to address. Interpretive action also is important for anticipating the impacts various actions could have on ourselves and others. Class discussions, journal writing, and role playing are class activities that students and teachers often use which involve interpretive action.

Reflective Action

Reflective action is a key component of the practical problems approach. Reflective actions feature critical examination of various alternatives, with a goal of selecting the "best" action to take. Reflective actions are used to answer questions such as, "What should we do?" "What is the best action to take?" Reflective action relies on technical knowledge and skills. It also depends on interpretive actions through which we aim to understand our own and others' points of view. Reflective action seeks to examine and address the root issues, the causes of problems that individuals and families face, and to make choices that will be best for selves, others, and society. Classroom activities in which students

make decisions and then must defend the choices they make are examples of reflective action. Other classroom activities which can emphasize reflective action include journal writing, role playing, group discussion, social action, and service learning.

Presentation of Process Questions in the Standards Document

In order to assure that the procedure for developing process questions would include questions that helped students consider all three types of action within each of the organizing processes, those who worked on the process questions for the standards crosswalked the three types of action with the four organizing processes. The resulting matrix shows twelve cells that represent the permutations achieved by the crosswalk. This matrix, yielding four sets of process questions, was applied to each content standard. Each set includes questions for technical, interpretive, and reflective action, generally in that order. Section II of this document presents all components of the standards, including the process questions described above.

Matrix for Processes / Actions Questions


Organizing Processes	Types of Action		
	Technical Action	Interpretive Action	Reflective Action
Thinking Processes	<i>Questions that lead to technical actions about thinking processes</i>	<i>Questions that lead to interpretive actions about thinking processes</i>	<i>Questions that lead to reflective actions about thinking processes</i>
Communication Processes	<i>Questions that lead to technical actions about communication processes</i>	<i>Questions that lead to interpretive actions about communication processes</i>	<i>Questions that lead to reflective actions about communication processes</i>
Leadership Processes	<i>Questions that lead to technical actions about leadership processes</i>	<i>Questions that lead to interpretive actions about leadership processes</i>	<i>Questions that lead to reflective actions about leadership processes</i>
Management Processes	<i>Questions that lead to technical actions about management processes</i>	<i>Questions that lead to interpretive actions about management processes</i>	<i>Questions that lead to reflective actions about management processes</i>

Reasoning for Action Standard

In order to highlight the relevance and applicability of the reasoning for action standard for all areas of study, it is presented with its defining content standards and competencies in this introductory section of the standards document.

Comprehensive Standard

Uses reasoning processes, individually and collaboratively, to take responsible action in families, workplaces, and communities.



Reasoning
for
Action

Content Standards and Competencies

1. Evaluate reasoning for self and others.
 - 1.1 Analyze different kinds of reasoning (e.g., scientific, practical, interpersonal).
 - 1.2 Distinguish between adequate and inadequate reasoning.
 - 1.3 Identify criteria for adequate reasoning for action.
 - 1.4 Identify consequences of inadequate and adequate reasoning for self and others.
2. Analyze recurring and evolving family, workplace, and community concerns.
 - 2.1 Distinguish different types of concerns (e.g., theoretic, technical, and practical problems) and alternative methods for addressing them.
 - 2.2 Identify recurring and evolving concerns facing individuals, families, workplaces, and communities.
 - 2.3 Identify conditions that create or sustain recurring concerns.
 - 2.4 Describe levels of problems: individual, family, cultural/societal.
3. Analyze practical reasoning components.
 - 3.1 Distinguish types of knowledge needed for reasoned action: value-ends, goals, contextual factors, alternative actions, and consequences.
 - 3.2 Distinguish short-term and long-term consequences on self, family, and society.
 - 3.3 Analyze assumptions underlying beliefs and actions.
 - 3.4 Distinguish adequate, reliable information from inadequate, unreliable information.
 - 3.5 Distinguish role exchange, universal consequences, and other tests for making ethical judgements.
 - 3.6 Distinguish adequate from inadequate reasons.

4. Demonstrate practical reasoning for ethical action in families, workplaces, and communities.
 - 4.1 Collect information from a variety of reliable sources.
 - 4.2 Identify recurring and evolving individual, family, workplace, and community concerns.
 - 4.3 Determine goals/valued ends to resolve a concern.
 - 4.4 Establish standards for choosing responsible action.
 - 4.5 Evaluate the conditions of the particular concern: historical, social-psychological, socioeconomic, political, and cultural conditions.
 - 4.6 Create reasonable actions for reaching goals/valued ends.
 - 4.7 Use adequate, reliable information in reasoning.
 - 4.8 Evaluate potential short- and long-term consequences of alternative actions on self, others, and society.
 - 4.9 Give reasons based on valued ends and scientific facts.
 - 4.10 Make a decision about action to take supported by adequate and ethical reasons, valued ends, contextual conditions, and positive consequences of actions.
 - 4.11 Develop a plan of action.
 - 4.12 Take action based on adequate and ethical reasons.
 - 4.13 Evaluate and monitor actions, including consequences on self, others, and society.
5. Demonstrate scientific inquiry and reasoning to gain factual knowledge and test theories on which to base judgements for action.
 - 5.1 Define terms.
 - 5.2 Judge validity and reliability of information, sources, opinions, and evidence.
 - 5.3 Give reasons based on scientific principles, observations, evidence.
 - 5.4 Hypothesize and test hypotheses and theories.
 - 5.5 Draw conclusions based on factual data and information.
 - 5.6 Evaluate scientific reasoning processes.

Section II

NATIONAL STANDARDS FOR FAMILY AND CONSUMER SCIENCES EDUCATION

Chapter 4

FACS Areas of Study

- **Comprehensive Standards**
- **Content Standards**
- **Standards and Related Elements for Each Area of Study**

COMPREHENSIVE STANDARDS

Family
and Consumer
Sciences Education
National Standards

CAREER, COMMUNITY, AND FAMILY CONNECTIONS

- 1.0 Integrate multiple life roles and responsibilities in family, work, and community settings.

CONSUMER AND FAMILY RESOURCES

- 2.0 Evaluate management practices related to the human, economic, and environmental resources.

CONSUMER SERVICES

- 3.0 Integrate knowledge, skills, and practices required for careers in consumer services.

EARLY CHILDHOOD, EDUCATION, AND SERVICES

- 4.0 Integrate knowledge, skills, and practices required for careers in early childhood, education, and services.

FACILITIES MANAGEMENT AND MAINTENANCE

- 5.0 Integrate knowledge, skills, and practices required for careers in facilities management and maintenance.

FAMILY

- 6.0 Evaluate the significance of family and its impact on the well-being of individuals and society.

FAMILY AND COMMUNITY SERVICES

- 7.0 Integrate knowledge, skills, and practices required for careers in family and community services.

FOOD PRODUCTION AND SERVICES

- 8.0 Integrate knowledge, skills, and practices required for careers in food production and services.

COMPREHENSIVE STANDARDS

FOOD SCIENCE, DIETETICS, AND NUTRITION

- 9.0 Integrate knowledge, skills, and practices required for careers in food science, dietetics, and nutrition.

HOSPITALITY, TOURISM, AND RECREATION

- 10.0 Integrate knowledge, skills, and practices required for careers in hospitality, tourism, and recreation.

HOUSING, INTERIORS, AND FURNISHINGS

- 11.0 Integrate knowledge, skills, and practices required for careers in housing, interiors, and furnishings.

HUMAN DEVELOPMENT

- 12.0 Analyze factors that impact human growth and development.

INTERPERSONAL RELATIONSHIPS

- 13.0 Demonstrate respectful and caring relationships in the family, workplace, and community.

NUTRITION AND WELLNESS

- 14.0 Demonstrate nutrition and wellness practices that enhance individual and family well-being.

PARENTING

- 15.0 Evaluate the impact of parenting roles and responsibilities on strengthening the well-being of individuals and families.

TEXTILES AND APPAREL

- 16.0 Integrate knowledge, skills, and practices required for careers in textiles and apparel.

CONTENT STANDARDS

Family
and Consumer
Sciences Education
National Standards

CAREER, COMMUNITY, AND FAMILY CONNECTIONS

- 1.0 Integrate multiple life roles and responsibilities in family, work, and community settings.**
 - 1.1 Analyze strategies to manage multiple individual, family, career, and community roles and responsibilities.
 - 1.2 Demonstrate transferable and employability skills in community and workplace settings.
 - 1.3 Analyze the reciprocal impact of individual and family participation in community activities.

CONSUMER AND FAMILY RESOURCES

- 2.0 Evaluate management practices related to the human, economic, and environmental resources.**
 - 2.1 Demonstrate management of individual and family resources, including food, clothing, shelter, health care, recreation, and transportation.
 - 2.2 Analyze the relationship of the environment to family and consumer resources.
 - 2.3 Analyze policies that support consumer rights and responsibilities.
 - 2.4 Evaluate the impact of technology on individual and family resources.
 - 2.5 Analyze interrelationships between the economic system and consumer actions.
 - 2.6 Demonstrate management of financial resources to meet the goals of individuals and families across the life span.

CONTENT STANDARDS

CONSUMER SERVICES

3.0 Integrate knowledge, skills, and practices required for careers in consumer services.

- 3.1 Analyze career paths within consumer service industries.
- 3.2 Analyze factors that impact consumer advocacy.
- 3.3 Analyze factors in developing a long-term financial management plan.
- 3.4 Analyze resource consumption for conservation and waste management practices.
- 3.5 Demonstrate skills needed for product development, testing, and presentation.

EARLY CHILDHOOD, EDUCATION, AND SERVICES

4.0 Integrate knowledge, skills, and practices required for careers in early childhood, education, and services.

- 4.1 Analyze career paths within early childhood, education, and services.
- 4.2 Analyze developmentally appropriate practices to plan for early childhood, education, and services.
- 4.3 Demonstrate integration of curriculum and instruction to meet children's developmental needs and interests.
- 4.4 Demonstrate a safe and healthy learning environment for childrer
- 4.5 Demonstrate techniques for positive collaborative relationships with children.
- 4.6 Demonstrate professional practices and standards related to working with children.

FACILITIES MANAGEMENT AND MAINTENANCE

5.0 Integrate knowledge, skills, and practices required for careers in facilities management and maintenance.

- 5.1 Analyze career paths within the facilities management and maintenance areas.
- 5.2 Demonstrate planning, organizing, and maintaining an efficient housekeeping operation.
- 5.3 Demonstrate sanitation procedures for a clean and safe environment.
- 5.4 Apply hazardous materials and waste management procedures.
- 5.5 Demonstrate a work environment that provides safety and security.
- 5.6 Demonstrate appropriate laundering processes.
- 5.7 Demonstrate facilities management functions.

FAMILY

6.0 Evaluate the significance of family and its impact on the well-being of individuals and society.

- 6.1 Analyze the impact of family as a system on individuals and society.
- 6.2 Demonstrate appreciation for diverse perspectives, needs, and characteristics of individuals and families.

CONTENT STANDARDS

FAMILY AND COMMUNITY SERVICES

- 7.0** **Integrate knowledge, skills, and practices required for careers in family and community services.**
 - 7.1 Analyze career paths within family and community services.
 - 7.2 Analyze factors related to providing family and community services.
 - 7.3 Demonstrate professional behaviors, skills, and knowledge in providing family and community services.
 - 7.4 Evaluate conditions affecting individuals and families with a variety of disadvantaging conditions.
 - 7.5 Identify services for individuals and families with a variety of disadvantaging conditions.

FOOD PRODUCTION AND SERVICES

- 8.0** **Integrate knowledge, skills, and practices required for careers in food production and services.**
 - 8.1 Analyze career paths within the food production and food services industries.
 - 8.2 Demonstrate food safety and sanitation procedures.
 - 8.3 Demonstrate selecting, using, and maintaining food production equipment.
 - 8.4 Demonstrate planning menu items based on standardized recipes to meet customer needs.
 - 8.5 Demonstrate commercial preparation for all menu categories to produce a variety of food products.
 - 8.6 Demonstrate implementation of food service management functions.
 - 8.7 Demonstrate the concept of internal and external customer service.

FOOD SCIENCE, DIETETICS, AND NUTRITION

9.0 Integrate knowledge, skills, and practices required for careers in food science, dietetics, and nutrition.

- 9.1 Analyze career paths within food science, dietetics, and nutrition industries.
- 9.2 Apply risk management procedures to food safety, food testing, and sanitation.
- 9.3 Evaluate nutrition principles, food plans, preparation techniques, and specialized dietary plans.
- 9.4 Demonstrate basic concepts of nutritional therapy.
- 9.5 Demonstrate use of current technology in food product development and marketing.
- 9.6 Demonstrate food science, dietetics, and nutrition management principles and practices.

HOSPITALITY, TOURISM, AND RECREATION

10.0 Integrate knowledge, skills, and practices required for careers in hospitality, tourism, and recreation.

- 10.1 Analyze career paths within the hospitality, tourism, and recreation industries.
- 10.2 Demonstrate procedures applied to safety, security, and environmental issues.
- 10.3 Apply concepts of service to meet customer expectations.
- 10.4 Demonstrate practices and skills involved in lodging occupations.
- 10.5 Demonstrate practices and skills for travel related services.
- 10.6 Demonstrate management of recreation, leisure, and other programs and events.

CONTENT STANDARDS

HOUSING, INTERIORS, AND FURNISHINGS

11.0 Integrate knowledge, skills, and practices required for careers in housing, interiors, and furnishings.

- 11.1 Analyze career paths within the housing, interiors, and furnishings industry.
- 11.2 Evaluate housing decisions in relation to available resources and options.
- 11.3 Evaluate the use of housing and interior furnishings and products in meeting specific design needs.
- 11.4 Demonstrate computer-aided drafting design, blueprint reading, and space planning skills required for the housing, interiors, and furnishings industry.
- 11.5 Analyze influences on architectural and furniture design and development.
- 11.6 Evaluate client's needs, goals, and resources in creating design plans for housing, interiors, and furnishings.
- 11.7 Demonstrate design ideas through visual presentation.
- 11.8 Demonstrate general procedures for business profitability and career success.

HUMAN DEVELOPMENT

12.0 Analyze factors that impact human growth and development.

- 12.1 Analyze principles of human growth and development across the life span.
- 12.2 Analyze conditions that influence human growth and development.
- 12.3 Analyze strategies that promote growth and development across the life span.

INTERPERSONAL RELATIONSHIPS

13.0 Demonstrate respectful and caring relationships in the family, workplace, and community.

- 13.1 Analyze functions and expectations of various types of relationships.
- 13.2 Analyze personal needs and characteristics and their impact on interpersonal relationships.
- 13.3 Demonstrate communication skills that contribute to positive relationships.
- 13.4 Evaluate effective conflict prevention and management techniques.
- 13.5 Demonstrate teamwork and leadership skills in the family, workplace, and community.
- 13.6 Demonstrate standards that guide behavior in interpersonal relationships.

NUTRITION AND WELLNESS

14.0 Demonstrate nutrition and wellness practices that enhance individual and family well-being.

- 14.1 Analyze factors that influence nutrition and wellness practices across the life span.
- 14.2 Evaluate the nutritional needs of individuals and families in relation to health and wellness across the life span.
- 14.3 Demonstrate ability to acquire, handle, and use foods to meet nutrition and wellness needs of individuals and families across the life span.
- 14.4 Evaluate factors that affect food safety, from production through consumption.
- 14.5 Evaluate the impact of science and technology on food composition, safety, and other issues.

CONTENT STANDARDS

PARENTING

- 15.0 Evaluate the impact of parenting roles and responsibilities on strengthening the well-being of individuals and families.**
 - 15.1 Analyze roles and responsibilities of parenting.
 - 15.2 Evaluate parenting practices that maximize human growth and development.
 - 15.3 Evaluate external support systems that provide services for parents.
 - 15.4 Analyze physical and emotional factors related to beginning the parenting process.

TEXTILES AND APPAREL

- 16.0 Integrate knowledge, skills, and practices required for careers in textiles and apparel.**
 - 16.1 Analyze career paths within the textiles and apparel design industry.
 - 16.2 Evaluate fiber and textiles materials.
 - 16.3 Demonstrate apparel and textiles design skills.
 - 16.4 Demonstrate skills needed to produce, alter, or repair textiles products and apparel.
 - 16.5 Evaluate elements of textiles and apparel merchandising.
 - 16.6 Evaluate the components of customer service.
 - 16.7 Demonstrate general operational procedures required for business profitability and career success.

COMPREHENSIVE STANDARD

Career,
Community,
and Family
Connections

- 1.0 Integrate multiple life roles and responsibilities in family, work, and community settings.**

CONTENT STANDARDS

- 1.1 Analyze strategies to manage multiple individual, family, career, and community roles and responsibilities.**
- 1.2 Demonstrate transferable and employability skills in community and workplace settings.**
- 1.3 Analyze the reciprocal impact of individual and family participation in community activities.**

CAREER, COMMUNITY, AND FAMILY CONNECTIONS

CONTENT STANDARD 1.1 Analyze strategies to manage multiple individual, family, career, and community roles and responsibilities.

COMPETENCIES	ACADEMIC PROFICIENCIES
<p>1.1.1 Examine policies, issues, and trends in the workplace and community that impact individuals and families.</p> <p>1.1.2 Analyze the impact of social, economic, and technological change on work and family dynamics.</p> <p>1.1.3 Analyze ways that individual career goals can enhance the family's capacity to meet goals for all family members.</p> <p>1.1.4 Analyze the potential impact of career path decisions on balancing work and family.</p> <p>1.1.5 Determine goals for life-long learning and leisure opportunities for all family members.</p> <p>1.1.6 Determine skills and knowledge needed to develop a life plan for achieving individual, family, and career goals.</p>	<p>Language Arts</p> <ul style="list-style-type: none">• Applies the reading process and strategies to directions or tasks that are relatively short and with limited categories of information, directions, concepts and vocabulary (LA 1)• Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)• Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)• Demonstrates competence in speaking to provide, distribute, or find information (LA 4)• Demonstrates competence in making oral formal and informal presentations, including selecting and using media (LA 5)• Adapts listening strategies to utilize verbal and nonverbal content of the communication (LA 6) <p>Mathematics</p> <ul style="list-style-type: none">• Adds, subtracts, divides, and multiplies whole and mixed numbers, fractions, and decimals (MA 1), (MA 2)• Mentally adds, subtracts, divides and multiplies whole numbers (MA 4)

CAREER, COMMUNITY, AND FAMILY CONNECTIONS

PROCESS QUESTIONS 1.1

Thinking

- What factors should be considered when developing policies related to the workplace? family? community?
- How can leadership skills be integrated into the family? career? community? What factors will affect trends in the workplace? community?
- How should we evaluate criteria used for developing a life plan based on how it reflects family, career, learning, leisure, and the community?

Communication

- How can families and individuals address the impact of trends in the workplace?
- What criteria should be used to help decide policies related to critical issues in the family? How can the workplace be respectful of the family, individuals, and community?
- What would be the consequences if a person chose not to design a life plan that reflects family, career, learning, leisure, and community goals?

Leadership

- What leadership techniques do we need to know to develop workplace strategies?
- How can community develop leadership skills? What can we do to develop strategies that address the needs of individuals and families in the workplace?

PROCESS QUESTIONS (Continued)

Leadership (Continued)

- How will continuous evaluation and improvement of a life plan support the vision of well-being for individual, family, career, and community?

Management

- How do family, workplace, and community issues impact trends in the family?
- How can a manager evaluate employee reaction to the development of policies related to critical issues in the workplace? What criteria should be used to address the level of impact that a workplace issue has on the family and community?
- How do we decide the best way to develop a life plan that reflects family, career, learning, leisure, and community goals?

CAREER, COMMUNITY, AND FAMILY CONNECTIONS

CONTENT STANDARD 1.2 Demonstrate transferable and employability skills in community and workplace settings.

COMPETENCIES

- 1.2.1 Examine potential career choices to determine the knowledge, skills, and attitudes associated with each.
- 1.2.2 Demonstrate job seeking and job keeping skills.
- 1.2.3 Apply communication skills in community and workplace settings.
- 1.2.4 Demonstrate teamwork skills in community and workplace settings.
- 1.2.5 Examine strategies to manage the impact of changing technologies in workplace settings.
- 1.2.6 Demonstrate leadership skills and abilities in the workplace and community.
- 1.2.7 Examine factors that contribute to maintaining safe and healthy work and community environments.
- 1.2.8 Demonstrate work ethics and professionalism.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

CAREER, COMMUNITY, AND FAMILY CONNECTIONS

PROCESS QUESTIONS 1.2

Thinking

- How do we identify reliable information about employability skills?
- What would be the consequence to the individual of using or not using transferable employability skills?
- How can we develop employability skills that support our vision for the well-being of individual, family, career, and community (synthesize)?

Communication

- What communication skills are needed for a job search? keeping a job?
- What cues should we look for to tell if an employer is pleased with our work?
- What effect does work ethic have on the well-being of an individual? family? community? career?

Leadership

- What skills are needed for employability?
- How can role playing help demonstrate transferable employability skills?
- What might happen if we chose to begin an apprenticeship program at our place of employment?

PROCESS QUESTIONS (Continued)

Management

- How can we develop a plan for acquiring transferable employability skills?
- How can examining different perspectives on employability help form personal criteria for developing employability skills?
- How can implementing transferable employability skills impact individual goals? family goals? community goals? career goals?

CAREER, COMMUNITY, AND FAMILY CONNECTIONS

CONTENT STANDARD 1.3 Analyze the reciprocal impact of individual and family participation in community activities.

COMPETENCIES

- 1.3.1 Examine goals that support individuals and family members in carrying out community and civic responsibilities.
- 1.3.2 Arrange a plan for individuals and families to select and develop skills in community activities.
- 1.3.3 Determine skills that provide beneficial services to the community.
- 1.3.4 Examine community resources and systems of formal and informal support available to individuals and families.
- 1.3.5 Examine the impact of public policies, agencies, and institutions on the family.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary **(LA 1)**
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks **(LA 2)**
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation **(LA 3)**
- Demonstrates competence in speaking to provide, distribute, or find information **(LA 4)**
- Adapts listening strategies to utilize verbal and nonverbal content of communication **(LA 6)**

CAREER, COMMUNITY, AND FAMILY CONNECTIONS

PROCESS QUESTIONS 1.3

Thinking

- What activities do families have related to community involvement?
- What environmental factors help determine our community involvement?
- Who benefits from families being involved in the community?

Communication

- What skills are needed when addressing community issues?
- How can we encourage others to become involved in the community?
- What would happen to a community working together to achieve the group's goals if families did not cooperate with each other?

Leadership

- What skills do we need to be able to work with community leaders?
- How might a variety of viewpoints affect the outcome of a community project?
- What would happen if a community worked together to achieve the group's goals?

PROCESS QUESTIONS (Continued)

Management

- What are possible consequences if families did not become involved in the community?
- What criteria should be used to determine community activities to involve families and individuals?
- How does individual and family participation affect the outcome of community activities?

COMPREHENSIVE STANDARD

Consumer
and Family
Resources

- 2.0 Evaluate management practices related to the human, economic, and environmental resources.**

CONTENT STANDARDS

- 2.1 Demonstrate management of individual and family resources, including food, clothing, shelter, health care, recreation, and transportation.**
- 2.2 Analyze the relationship of the environment to family and consumer resources.**
- 2.3 Analyze policies that support consumer rights and responsibilities.**
- 2.4 Evaluate the impact of technology on individual and family resources.**
- 2.5 Analyze interrelationships between the economic system and consumer actions.**
- 2.6 Demonstrate management of financial resources to meet the goals of individuals and families across the life span.**

CONSUMER AND FAMILY RESOURCES

CONTENT STANDARD 2.1 Demonstrate management of individual and family resources, including food, clothing, shelter, health care, recreation, and transportation.

COMPETENCIES	ACADEMIC PROFICIENCIES
<p>2.1.1 Apply management and planning skills and processes to organize tasks and responsibilities.</p> <p>2.1.2 Examine how individuals and families make choices to satisfy needs and wants.</p> <p>2.1.3 Implement decisions about providing safe and nutritious food for individuals and families.</p> <p>2.1.4 Implement decisions about purchasing, creating, and maintaining clothing.</p> <p>2.1.5 Implement decisions about housing and furnishings.</p> <p>2.1.6 Examine information about procuring and maintaining health care to meet the needs of individuals and family members.</p> <p>2.1.7 Implement decisions about recreational needs.</p> <p>2.1.8 Apply consumer skills to acquire and maintain transportation that meets the needs of individuals and family members.</p>	<p>Language Arts</p> <ul style="list-style-type: none">• Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts and vocabulary (LA 1)• Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)• Demonstrates competence in speaking to provide, distribute, or find information (LA 4) <p>Mathematics</p> <ul style="list-style-type: none">• Interprets charts, tables, and graphs (MA 174) <p>Science</p> <ul style="list-style-type: none">• Uses computers for information processing (SC 499)

CONSUMER AND FAMILY RESOURCES

PROCESS QUESTIONS 2.1

Thinking

- What are our concerns regarding food, clothing, shelter, health care, and transportation?
- What criteria can be used to decide the resources needed by a family?
- What choices might we create that would have positive effects on organizing tasks and responsibilities?

Communication

- How can we communicate our needs and wants effectively in making choices individually and in families?
- What insights do we have into implementing decisions in food, clothing, shelter, health care, and transportation as they relate to individuals and family needs and wants?
- In what way does the use of communication contribute to management principles?

Leadership

- What are our goals in food, clothing, shelter, health care and transportation?
- What goals do other family members have related to food, clothing, shelter, health care, and transportation?
- In what ways are our goals similar/different from those in the family/group?

PROCESS QUESTIONS (Continued)

Management

- What are our goals in relation to managing family needs and wants related to food, clothing, shelter, health care, and transportation?
- What personal factors will offset our goals? What resources need to be considered?
- What are the consequences of resources use by family members for various needs and wants?

CONSUMER AND FAMILY RESOURCES

CONTENT STANDARD 2.2 Analyze the relationship of the environment to family and consumer resources.

COMPETENCIES

- 2.2.1 Determine individual and family responsibility in relation to the environmental trends and issues.
- 2.2.2 Examine environmental trends and issues affecting families and future generations.
- 2.2.3 Examine behaviors that conserve, reuse, and recycle resources to maintain the environment.
- 2.2.4 Investigate government regulations for conserving natural resources.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts and vocabulary (**LA 1**)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts to perform specific tasks (**LA 2**)

Science

- Analyzes and evaluates environmental issues (SC 007)
- Analyzes environmental issues from information in the media (SC 010)

CONSUMER AND FAMILY RESOURCES

PROCESS QUESTIONS 2.2

Thinking

- What effect does the environment have on resources?
- What factors can affect decisions about our actions related to the environment?
- Whose interest will be served if our action supports unplanned environmental protection?

Communication

- How can we effectively communicate individual and family responsibilities in relation to the environment?
- What insights do we have into how environmental trends and issues affect family and future generations?
- In what way does the use of communication contribute to the implementation of government regulations for conserving natural resources?

Leadership

- What leadership techniques do we need to implement behaviors that conserve, reuse, and recycle resources to maintain the environment?
- How is conflict handled in our family/group concerning individual and family responsibilities in relation to the environment?
- Are our goals similar/different from those in our family/group concerning conservation, reuse, and recycling of resources to maintain the environment?

PROCESS QUESTIONS (Continued)

Management

- What are our goals regarding the environment? What resources will be required to implement our goals?
- What criteria should be used to assist us in determining our environmental actions?
- What are the consequences of making environmentally unsound decisions?

CONSUMER AND FAMILY RESOURCES

CONTENT STANDARD 2.3 Analyze policies that support consumer rights and responsibilities.

COMPETENCIES

- 2.3.1 Examine state and federal policies and laws providing consumer protection.
- 2.3.2 Investigate how policies become laws related to consumer rights.
- 2.3.3 Examine skills used in seeking information related to consumer rights.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media (LA 5)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

CONSUMER AND FAMILY RESOURCES

PROCESS QUESTIONS 2.3

Thinking

- What are state and federal policies and laws regarding goods and services?
- How do these policies and laws affect the consumer?
- Whose interests are served by the enforcement of state and federal policies and laws?

Communication

- What do we do to understand consumer rights? How can we promote consumer responsibility?
- What questions do we need to ask to clarify information about consumer rights and responsibilities?
- In what ways do we need to support consumer rights and responsibilities to contribute to building the community?

Leadership

- What are the goals of consumers in regard to state and federal policies and laws?
- How do these policies and laws help to prevent conflict with consumers?
- What should be done to support consumer's rights through enforcement?

PROCESS QUESTIONS (Continued)

Management

- What steps do we need to take to ensure consumers' rights and responsibilities?
- What are the effects of the consumer rights policies and laws on business/industry?
- What are the consequences (positive and negative) of state and federal laws for the consumer? business and industry?

CONSUMER AND FAMILY RESOURCES

CONTENT STANDARD 2.4 Evaluate the impact of technology on individual and family resources.

COMPETENCIES

- 2.4.1 Review types of technology that impact family and consumer decision-making.
- 2.4.2 Examine how media and technological advances impact family and consumer decisions.
- 2.4.3 Assess the use of technology and its impact on quality of life.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (**LA 1**)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (**LA 2**)

CONSUMER AND FAMILY RESOURCES

PROCESS QUESTIONS 2.4

Thinking

- What information do we need to understand decisions related to the impact of technology on individual and family resource management?
- What criteria can we use to help us decide uses of technology for resource management?
- What alternatives might we create that could be used to plan technology? Is the information provided through the use of technology more reliable and relevant?

Communication

- What do we do about understanding the impact of technology on family resources?
- What is communicated in media and technological advancement to assist individuals and families?
- What are the consequences (short- and long-term) of technology on consumer decision-making and financial planning?

Leadership

- What technological advancements do we need to share with others in order to assist in their activities at home, in the workplace, and in the community?
- How do we know if we are sharing ideas about how technological advances impact family life?

PROCESS QUESTIONS (Continued)

Management

- What goals do we have in relation to the use of technology for resource management?
- How might one of our member's goals affect the use of technology in our family?
- What are the possible consequences of using technology to manage resources?

CONSUMER AND FAMILY RESOURCES

CONTENT STANDARD 2.5 Analyze interrelationships between the economic system and consumer actions.

COMPETENCIES

- 2.5.1 Examine the use of resources in making choices that satisfy needs and wants of individuals and families.
- 2.5.2 Examine individual and family roles in the economic system.
- 2.5.3 Examine economic impacts of laws and regulations that pertain to consumers and providers of services.
- 2.5.4 Determine practices that allow families to maintain economic self-sufficiency.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (**LA 1**)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (**LA 2**)

Mathematics

- Adds, subtracts, divides, and multiplies, mixed numbers, fractions, and decimals (**MA 1**), (**MA 2**)
- Uses a calculator to add, subtract, divide, and multiply whole and mixed numbers, decimals, and calculate square root (**MA 3**)
- Mentally adds, subtracts, divides and multiplies whole numbers (**MA 4**)
- Uses a calculator to add, subtract, divide, multiply, and calculate percentages, ratios (**MA 5**)

CONSUMER AND FAMILY RESOURCES

PROCESS QUESTIONS 2.5

Thinking

- What factors should be considered in relation to understanding how the consumer functions as part of the economic system?
- What criteria can be used to help us make consumer decisions?
- What alternatives may be considered in the determination of individual and family consumer actions?

Communication

- How can we effectively communicate personal responsibility for use of resources?
- What insights do we have into laws and regulations that pertain to consumers and providers of services?
- In what ways does the use of communication contribute to practices that allow families to maintain self-efficiency?

Leadership

- What skills do we need to relate to others about the exchange of work or resources for income to buy goods and services and pay taxes?
- What do consumer decisions and actions as leaders mean to the economics system?
- What effect would the consequences of consumer decisions and actions have on individuals and families?

PROCESS QUESTIONS (Continued)

Management

- How can we maintain economic self-sufficiency?
- What do our actions mean about personal responsibility for use of resources?
- What are the consequences (positive and negative) of the interrelationship between the economics system and consumer decisions and actions?

CONSUMER AND FAMILY RESOURCES

CONTENT STANDARD 2.6 Demonstrate management of financial resources to meet the goals of individuals and families across the life span.

COMPETENCIES	ACADEMIC PROFICIENCIES
<p>2.6.1 Examine the need for personal and family financial planning.</p> <p>2.6.2 Apply management principles to individual and family financial practices.</p> <p>2.6.3 Apply management principles to decisions about individual and family insurance.</p> <p>2.6.4 Obtain personal and legal documents related to managing individual and family finances.</p>	<p>Language Arts</p> <ul style="list-style-type: none">• Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)• Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2) <p>Mathematics</p> <ul style="list-style-type: none">• Adds, subtracts, divides, and multiplies whole and mixed numbers, fractions, and decimals (MA 1), (MA 2)• Uses a calculator to add, subtract, divide, and multiply whole and mixed numbers, decimals, and calculate square root (MA 3)• Mentally adds, subtracts, divides and multiplies whole numbers (MA 4)

CONSUMER AND FAMILY RESOURCES

PROCESS QUESTIONS 2.6

Thinking

- What are our financial goals? What financial planning resources will be needed to reach our goals?
- What criteria should be used to decide how to apply financial planning? What value will this plan have for us and for family members?
- What are the consequences (positive and negative) of having a financial plan?

Communication

- What do we do about understanding the need for personal and family financial planning?
- What meaning do we impart to financial planning across the life span?
- How do we eliminate or minimize the roadblocks to financial planning?

Leadership

- What leadership skills do we need to reach our financial goals?
- What goals do our families have toward financial planning?
- Are our financial goals similar/different from those of others in the family? of other families?

PROCESS QUESTIONS (Continued)

Management

- What resources do we have to reach our financial goals? How do we access these resources?
- What resources do others have that might help us? How can we work together to achieve financial goals?
- What are the consequences (positive and negative) of using resources to help us?

COMPREHENSIVE STANDARD

Consumer
Services

- 3.0 Integrate knowledge, skills, and practices required for careers in consumer services.**

CONTENT STANDARDS

- 3.1 Analyze career paths within consumer service industries.**
- 3.2 Analyze factors that impact consumer advocacy.**
- 3.3 Analyze factors in developing a long-term financial management plan.**
- 3.4 Analyze resource consumption for conservation and waste management practices.**
- 3.5 Demonstrate skills needed for product development, testing, and presentation.**

CONSUMER SERVICES

CONTENT STANDARD 3.1 Analyze career paths within consumer service industries.

COMPETENCIES

- 3.1.1 Determine roles and functions of individuals engaged in consumer service careers.
- 3.1.2 Explore opportunities for employment and entrepreneurial endeavors.
- 3.1.3 Examine education and training requirements and opportunities for career paths in consumer services.
- 3.1.4 Examine the impact of the consumer service industry on local, state, national, and global economies.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)

Mathematics

- Interprets charts, tables, and graphs (MA 174)

Science

- Uses computers for information processing (SC 499)

PROCESS QUESTIONS 3.1

Thinking

- What careers are involved in the consumer services industry? What information about careers do we need?
- What criteria might be used when exploring consumer service careers?
- Why is it important to research careers in the consumer services industry? What values support a career decision?

Communication

- What communication skills are necessary for a career in this field?
- What questions need to be answered in order to make a wise career selection in consumer affairs occupations?
- What are the consequences of selecting a career in the consumer affairs industry?

Leadership

- What leadership qualities are needed in consumer services occupations.
- How do our leadership skills affect career entrepreneur success or failure?
- What strategies would bring about changes in the perception of consumer affairs occupations?

PROCESS QUESTIONS (Continued)

Management

- What resources and training are required for a career in the consumer services occupations?
- What personal factors affect our career choices and goals in this industry?
- What might be the long-term and short-term career goals if we choose consumer affairs occupations?

CONSUMER SERVICES

CONTENT STANDARD 3.2 Analyze factors that impact consumer advocacy.

COMPETENCIES

- 3.2.1 Examine the role of advocacy groups at state and national levels.
- 3.2.2 Determine the contributions of policy makers to consumer advocacy.
- 3.2.3 Explore strategies that enable consumers to become advocates.
- 3.2.4 Examine the effects of consumer protection laws on advocacy.
- 3.2.5 Determine strategies to reduce the risk of consumer fraud.
- 3.2.6 Examine the role of media in consumer advocacy.
- 3.2.7 Determine the effects of manufacturers' policies and procedures on advocacy.
- 3.2.8 Explore the use of educational and promotional materials in consumer advocacy.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (**LA 1**)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (**LA 2**)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (**LA 3**)
- Demonstrates competence in speaking to provide, distribute, or find information (**LA 4**)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (**LA 6**)

Mathematics

- Solves problems and generates conclusions using deductive reasoning (**MA 229**)

Science

- Uses computers for information processing (**SC 499**)

PROCESS QUESTIONS 3.2

Thinking

- What contextual factors should be considered when defining the role of an advocacy group?
- What factors will affect the decisions of a consumer advocacy group?
- Whose interests are served by the use of a consumer advocacy group?

Communication

- As a consumer advocate, how can we effectively communicate with those we represent?
- What questions can we ask to clarify the needs of the group we represent as a consumer advocate?
- How do we eliminate the communication roadblocks between an advocate and the policy makers?

Leadership

- What skills would a consumer advocate need to relate to others?
- What actions do we take as leaders to prevent conflict in an advocacy group?
- What should be done to facilitate consumer building between an advocate and the group being represented?

PROCESS QUESTIONS (Continued)

Management

- What steps do we need to take to develop consumer protection laws?
- What criteria should be used to analyze consumer protection laws?
- Considering our criteria, what other ways could we become consumer advocates in the future?

CONSUMER SERVICES

CONTENT STANDARD 3.3 Analyze factors in developing a long-term financial management plan.

COMPETENCIES

- 3.3.1 Explain the impact of the economic system on personal income, individual and family security and consumer decisions.
- 3.3.2 Examine components of a financial planning process that reflects the distinction between needs and wants, values, goals, and economic resources.
- 3.3.3 Determine the impact of consumers' credit in long-term financial planning.
- 3.3.4 Examine investment and savings alternatives.
- 3.3.5 Determine the effects of risk management strategies on long-term financial planning.
- 3.3.6 Consider the impact of key life transitions on financial planning.
- 3.3.7 Explain the role of estate planning in long-term financial planning.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)

ACADEMIC PROFICIENCIES (Continued)

- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media (LA 5)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

Mathematics

- Adds, subtracts, divides, and multiplies whole and mixed numbers, fractions, and decimals (MA 1), (MA 2)
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, and calculate square root (MA 3)
- Mentally adds, subtracts, divides, and multiplies whole numbers (MA 4)
- Uses a calculator to add, subtract, divide, multiply, and calculate percentages, ratios (MA 5)
- Calculates and evaluates basic statistical routines (MA 019)
- Solves problems and generates conclusions using deductive reasoning (MA 229)
- Understands sampling theory, probability theory, and error of measure (MA 257, MA 258, MA 259)

Science

- Applies and uses maps, charts, tables and graphs to complete tasks (SC 042)
- Uses computers for information processing (SC 499)

PROCESS QUESTIONS 3.3

Thinking

- What contextual factors should be considered when making consumer decisions?
- What criteria should be used to determine what financial decisions are necessary?
- How will the financial decisions we make affect ourselves, our families, and our communities?

Communication

- What terminology must we learn to be able to communicate about finances?
- What questions do we need to ask to be able to develop a long-term financial plan?
- What are the consequences (positive and negative) in developing a long-term financial plan?

Leadership

- What leadership skills affect the success of a long-term financial plan?
- How could leadership skills affect the success of a long-term financial plan?
- What are the implications of developing a long-term financial plan on self? others? community? Is the financial plan ethically defensible?

PROCESS QUESTIONS (Continued)

Management

- What resources are available to develop a long-term financial plan?
- Why is it important to consider the impact of personal factors on the success of a long-term financial plan?
- What are personal consequences of developing a long-term financial plan?

CONSUMER SERVICES

CONTENT STANDARD 3.4 Analyze resource consumption for conservation and waste management practices.

COMPETENCIES

- 3.4.1 Investigate sources and types of residential and commercial energy, waste disposal, and pollution issues.
- 3.4.2 Investigate consumer programs and services provided by government, public utilities, resource recovery businesses, and environmental organizations.
- 3.4.3 Explore strategies and practices to conserve energy and reduce waste.
- 3.4.4 Examine waste management issues.
- 3.4.5 Examine roles of government, industry, and family in energy consumption.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

Mathematics

- Adds, subtracts, divides, multiplies, whole and mixed numbers, fractions, and decimals (MA 1), (MA 2)
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, and calculate square root (MA 3)
- Mentally adds, subtracts, divides, and multiplies whole numbers (MA 4)
- Uses a calculator to add, subtract, divide, and multiply, calculate percentages, ratios (MA 5)
- Constructs charts, tables, and graphs (MA 097)
- Solves problems and generates conclusions using deductive reasoning (MA 229)

Science

- Applies and uses maps, charts, tables and graphs to complete tasks (SC 042)

PROCESS QUESTIONS 3.4

Thinking

- What are some conservation and waste management concerns?
- Why should we be concerned about the impact of conservation and waste management on the home and workplace?
- What is best to do ethically about conservation and waste management?

Communication

- How can we communicate strategies for conservation and waste management?
- In what way does the use of communication contribute to the increased awareness of the need for conservation and waste management practices in the community?
- What questions do we need to ask to clarify the need for conservation and waste management practices?

Leadership

- What are some goals for conservation and waste management?
- What actions can we take as leaders to insure conservation and waste management practices are understood and followed?
- What effect would the consequences (positive and negative) of using a waste management plan have on the next generation?

PROCESS QUESTIONS (Continued)

Management

- What are the steps for developing a conservation and waste management plan?
- What historical circumstances have led to the need for improved conservation and waste management practices?
- What are the consequences (positive and negative) of using a waste management plan for the present generation? future generations?

CONSUMER SERVICES

CONTENT STANDARD 3.5 Demonstrate skills needed for product development, testing, and presentation.

COMPETENCIES	ACADEMIC PROFICIENCIES (Continued)
<p>3.5.1 Conduct market research to determine consumer trends and product development needs.</p> <p>3.5.2 Design or analyze a consumer product.</p> <p>3.5.3 Examine features, prices, product information, styles, and performance of consumer goods for potential trade-offs among the components.</p> <p>3.5.4 Perform a test on a product utilizing valid and reliable testing procedures.</p> <p>3.5.5 Apply statistical analysis processes to interpret, summarize, and report data from tests.</p> <p>3.5.6 Examine the labeling, packaging, and support materials of consumer goods.</p> <p>3.5.7 Demonstrate a product or educate an audience.</p> <p>3.5.8 Utilize appropriate sales techniques to compare, demonstrate, assist, and advise consumers in the selection of goods and services that meet consumer needs.</p>	<ul style="list-style-type: none"> • Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2) • Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3) • Demonstrates competence in speaking to provide, distribute, or find information (LA 4) • Demonstrates competence in making oral formal and informal presentations, including selecting and using media (LA 5) • Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6) <p>Mathematics</p> <ul style="list-style-type: none"> • Adds, subtracts, divides, and multiplies whole and mixed numbers, fractions, and decimals (MA 1), (MA 2) • Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, and calculate square root (MA 3) • Mentally adds, subtracts, divides, and multiplies whole numbers (MA 4) • Uses a calculator to add, subtract, divide, and multiply, calculate percentages, ratios (MA 5) • Understands and applies advanced concepts of probability and statistics (MA 11) <p>Science</p> <ul style="list-style-type: none"> • Applies and uses maps, charts, tables and graphs to complete tasks (SC 042) • Applies and uses scientific methods to solve problems (SC 044) • Identifies operational definitions (SC 467) • Uses computers for information processing (SC 499)
ACADEMIC PROFICIENCIES	
<p>Language Arts</p> <ul style="list-style-type: none"> • Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1) 	

PROCESS QUESTIONS 3.5

Management

- What are the goals? What resources are available? What skills are needed? What are the steps in conducting these activities?
- What standards are available for conducting these activities?
- What are the consequences of these activities?

COMPREHENSIVE STANDARD

Early Childhood,
Education, and
Services

4.0 Integrate knowledge, skills, and practices required for careers in early childhood, education, and services.

CONTENT STANDARDS

- 4.1 Analyze career paths within early childhood, education, and services.**
- 4.2 Analyze developmentally appropriate practices to plan for early childhood, education, and services.**
- 4.3 Demonstrate integration of curriculum and instruction to meet children's developmental needs and interests.**
- 4.4 Demonstrate a safe and healthy learning environment for children.**
- 4.5 Demonstrate techniques for positive collaborative relationships with children.**
- 4.6 Demonstrate professional practices and standards related to working with children.**

EARLY CHILDHOOD, EDUCATION, AND SERVICES

CONTENT STANDARD 4.1 Analyze career paths within early childhood, education, and services.

COMPETENCIES

- 4.1.1 Determine the roles and functions of individuals engaged in early childhood, education, and services.
- 4.1.2 Explore opportunities for employment and entrepreneurial endeavors.
- 4.1.3 Examine education and training requirements and opportunities for career paths in early childhood, education, and services.
- 4.1.4 Examine the impact of early childhood, education, and services occupations on local, state, national, and global economics.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)

Mathematics

- Interprets charts, tables, and graphs (MA 174)

Science

- Uses computers for information processing (SC 499)

EARLY CHILDHOOD, EDUCATION, AND SERVICES

PROCESS QUESTIONS 4.1

Thinking

- What career options are available now? In the future?
- What are personal skills, interest and values? What other factors affect career choices? What are ethical implications of career choice?
- Is our information about careers relevant and relative? What are the related alternatives? What career choices should be made based on this information?

Communication

- What communication skills are necessary for a career in a chosen field?
- What questions need to be answered in order to make a wise career decision?
- What are the consequences (positive and negative) of this career choice?

Leadership

- What leadership qualities are needed for success in early childhood, education, and services careers?
- How do leadership skills affect career success or failure?
- What goals are similar and different to others in this field?

PROCESS QUESTIONS (Continued)

Management

- What training and resources are required for a career in early childhood, education, and services?
- What personal factors affect career goals and choices in this field?
- What might be the impact of long-term and short-term career goals on choice? for self? for others?

EARLY CHILDHOOD, EDUCATION, AND SERVICES

CONTENT STANDARD 4.2 Analyze developmentally appropriate practices to plan for early childhood, education, and services.

COMPETENCIES

- 4.2.1 Examine child development theories and their implications for educational and childcare practices.
- 4.2.2 Determine a variety of assessment methods to observe and interpret children's growth and development.
- 4.2.3 Consider cultural and environmental influences when assessing children's development.
- 4.2.4 Determine special needs of children.
- 4.2.5 Put into effect strategies that promote children's growth and development.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)

Mathematics

- Adds, subtracts, divides, and multiplies whole numbers (MA 1)

Science

- Applies and uses maps, charts, tables, and graphs to complete tasks (SC 042)
- Applies and uses scientific methods to solve problems (SC 044)
- Describes and explains organisms development and adaptation (SC 366, SC 367)
- Uses computers for information processing (SC 499)

EARLY CHILDHOOD, EDUCATION, AND SERVICES

PROCESS QUESTIONS 4.2

Thinking

- What are developmentally appropriate practices?
- What is the goal of developmentally appropriate practices?
- What criteria should be used to determine which practices should be selected?

Communication

- What do we do about understanding children's differences (learning styles, cultures, etc.) in relation to developmentally appropriate practices?
- What is the meaning of developmentally appropriate practices?
- What are the consequences of using or not using developmentally appropriate practices with children? families? community? society?

Leadership

- What skills are needed to make wise decisions about using developmentally appropriate practices?
- How do we know if these developmentally appropriate practices are effective?
- What should be done to ensure that developmentally appropriate practices are utilized in the best interest of the children involved?

PROCESS QUESTIONS (Continued)

Management

- What assessment methods can be used to assess the development of children?
- What meaning can be gained through the use of these assessment methods?
- What should we do to ensure the well-being of children through assessment?

EARLY CHILDHOOD, EDUCATION, AND SERVICES

CONTENT STANDARD 4.3 Demonstrate integration of curriculum and instruction to meet children's developmental needs and interests.

COMPETENCIES	ACADEMIC PROFICIENCIES
<p>4.3.1 Examine a variety of curriculum and instructional models.</p> <p>4.3.2 Implement learning activities in all curriculum areas that meet the developmental needs of children.</p> <p>4.3.3 Implement an integrated curriculum that incorporates a child's language, learning styles, home experiences, and cultural values.</p> <p>4.3.4 Demonstrate a variety of teaching methods to meet individual needs of children.</p> <p>4.3.5 Arrange learning centers that provide for children's exploration, discovery, and development.</p> <p>4.3.6 Establish activities, routines, and transitions.</p>	<p>Language Arts</p> <ul style="list-style-type: none">• Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)• Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)• Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)• Demonstrates competence in speaking to provide, distribute, or find information (LA 4)• Demonstrates competence in making oral formal and informal presentations, including selecting and using media (LA 5)• Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6) <p>Mathematics</p> <ul style="list-style-type: none">• Adds, subtracts, divides, and multiplies whole numbers (MA 1) <p>Science</p> <ul style="list-style-type: none">• Identifies operational definitions (SC 467)• Use computers for information processing (SC 499)

EARLY CHILDHOOD, EDUCATION, AND SERVICES

PROCESS QUESTIONS 4.3

Thinking

- What contextual factors should be considered when developing and implementing curriculum based on children's developmental needs and interests? What learning experiences should we plan to meet children's developmental needs and interests?
- What are the developmental needs and interest of our children?
- What existing beliefs or actions create limits or prevent accomplishing the implementation of this curriculum?

Communication

- What are the family and cultural values of our children's families?
- What can we do to understand the developmental needs and interests of children?
- What should we do to build on families' values?

Leadership

- What skills do we need as leaders to implement integrated curriculum and instruction? What standards should we use to judge our curriculum and instruction?
- What are the consequences of implementing curriculum based on children's developmental needs and interests?

PROCESS QUESTIONS (Continued)

Leadership (Continued)

- What should be done to assess the impact of this curriculum on the development of the child? How might this curriculum impact the family and the community?

Management

- What resources are needed to meet children's needs and interests?
- What are curriculum and instruction goals?
- How should we implement the curriculum to ensure needs are met?

EARLY CHILDHOOD, EDUCATION, AND SERVICES

CONTENT STANDARD 4.4 Demonstrate a safe and healthy learning environment for children.

COMPETENCIES	ACADEMIC PROFICIENCIES
<p>4.4.1 Manage physical space to maintain a safe and healthy learning environment.</p> <p>4.4.2 Apply safe and healthy practices that comply with state regulations.</p> <p>4.4.3 Implement strategies to teach children health, safety, and sanitation habits.</p> <p>4.4.4 Provide safe and healthy meals and snacks.</p> <p>4.4.5 Document symptoms of child abuse and neglect and use appropriate procedures to report suspected abuse or neglect to the designated authorities.</p> <p>4.4.6 Implement basic health practices and prevention procedures for workers and children regarding childhood illness and communicable diseases.</p> <p>4.4.7 Demonstrate security and emergency procedures.</p>	<p>Language Arts</p> <ul style="list-style-type: none">• Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)• Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)• Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)• Demonstrates competence in speaking to provide, distribute, or find information (LA 4)• Demonstrates competence in making oral formal and informal presentations, including selecting and using media (LA 5)• Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)• Identifies a purpose and related strategy when speaking (LA 034) <p>Mathematics</p> <ul style="list-style-type: none">• Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals (MA 1), (MA 2) <p>Science</p> <ul style="list-style-type: none">• Knows the environmental impact of materials (solid, liquid, gaseous) (SC 2)• Understands the effect of chemicals on humans and plants (SC 3)• Applies and uses maps, charts, tables and graphs to complete tasks (SC 042)• Uses computers for information processing (SC 499)

EARLY CHILDHOOD, EDUCATION, AND SERVICES

PROCESS QUESTIONS 4.4

Thinking

- What are standards for a safe, healthy learning environment?
- What are the consequences of providing/ not providing a safe, healthy learning environment?
- What should be done to establish and maintain a safe, healthy learning environment?

Communication

- What criteria should be used to decide how to provide a safe, healthy, learning environment?
- What are the meanings of each standard?
- How can we communicate the standards for a safe, healthy, learning environment to parents and children?

Leadership

- What are the basic health practices and prevention procedures regarding illness and disease?
- What historical circumstances led to the formation of current health practices in this country?
- What will be the outcome if a safe environment is maintained? not maintained?

PROCESS QUESTIONS (Continued)

Management

- What are the steps to implementing safe and healthy practices that comply with state regulations?
- What are the basic criteria for meeting the state standards regarding safe and healthy practices?
- What are the consequences of managing healthy practices and prevention procedures?

EARLY CHILDHOOD, EDUCATION, AND SERVICES

CONTENT STANDARD 4.5 Demonstrate techniques for positive collaborative relationships with children.

COMPETENCIES	ACADEMIC PROFICIENCIES
<p>4.5.1 Establish developmentally appropriate guidelines for behavior.</p> <p>4.5.2 Demonstrate problem-solving skills with children.</p> <p>4.5.3 Demonstrate interpersonal skills that promote positive and productive relationships with children.</p> <p>4.5.4 Implement strategies for constructive and supportive interactions between children and families.</p> <p>4.5.5 Present information to parents regarding developmental issues and concerns related to children.</p>	<p>Language Arts</p> <ul style="list-style-type: none">• Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)• Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)• Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)• Demonstrates competence in speaking to provide, distribute, or find information (LA 4)• Demonstrates competence in making oral formal and informal presentations, including selecting and using media (LA 5)• Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6) <p>Science</p> <ul style="list-style-type: none">• Applies and uses maps, charts, tables and graphs to complete tasks (SC 042)• Applies and uses scientific methods to solve problems (SC 044)

EARLY CHILDHOOD, EDUCATION, AND SERVICES

PROCESS QUESTIONS 4.5

Thinking

- What are classroom management and child guidance methods? How can we communicate these methods to parents and community?
- What are our goals for classroom management and child guidance methods?
- What is the dominant classroom management method?

Communication

- What communication skills (verbal and nonverbal) are needed for classroom management?
- What are alternative classroom management methods (to dominant method) and their consequences?
- What are the consequences of the dominant classroom management method on different genders, ability levels, cultures, and developmental levels? How can miscommunication interfere with parent and community relationships?

Leadership

- What skills do children need for self-reliance? What skills do we need to relate effectively with families and community?
- How should we relate to children? What are the consequences (positive and negative) of leadership style on relationships with children?

PROCESS QUESTIONS (Continued)

Leadership (Continued)

- How might we support rather than dominate children? What might be the effect of this behavior? How can leadership style affect our parent and community relationships?

Management

- Why is it important to demonstrate positive classroom management and guidance?
- What factors need to be considered when selecting classroom management and guidance methods? What resources do we need to maintain positive collaborative relationships with families and the community?

EARLY CHILDHOOD, EDUCATION, AND SERVICES

CONTENT STANDARD 4.6 Demonstrate professional practices and standards related to working with children.

COMPETENCIES

- 4.6.1 Utilize opportunities for continuing training and education.
- 4.6.2 Apply professional ethical standards as accepted by the recognized professional organizations.
- 4.6.3 Implement federal, state, and local standards, policies, regulations, and laws which impact children, families, and programs.
- 4.6.4 Demonstrate enthusiasm, initiative, and commitment to program goals and improvements.
- 4.6.5 Apply business management skills to planning businesses in early childhood, education, and services.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)

ACADEMIC PROFICIENCIES (Continued)

- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media (LA 5)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

Mathematics

- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals (MA 1), (MA 2)
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, and calculate square root (MA 3)
- Mentally adds, subtracts, divides, and multiplies whole numbers (MA 4)
- Uses a calculator to add, subtract, divide, and multiply, calculate percentages, ratios (MA 5)
- Understands and applies basic methods of measurement (MA 6)
- Understands and applies advanced methods of measurement (MA 7)

Science

- Knows the environmental impact of materials (solid, liquid, gaseous) (SC 2)
- Applies and uses maps, charts, tables and graphs to complete tasks (SC 042)
- Applies and uses scientific methods to solve problems (SC 044)
- Uses computers for information processing (SC 499)

EARLY CHILDHOOD, EDUCATION, AND SERVICES

PROCESS QUESTIONS 4.6

Thinking

- What are the federal, state and local standards, policies, regulations, and laws related to working with children?
- What ethical standards support laws and policies related to children? What are the sources of these standards?
- What are the legal and ethical consequences of meeting and failing to meet standards for working with children?

Communication

- What practices ensure confidentiality?
- What steps should be taken to ensure the common interpretation of confidentiality practices?
- What beliefs, actions, or conditions create limits or distort confidentiality practices?

Leadership

- What leadership skills are needed to demonstrate professional practices and standards?
- How might practices help and/or harm children?
- Who would be most adversely affected by a lack of consideration of accepted practices?

PROCESS QUESTIONS (Continued)

Management

- What record keeping and management procedures are required?
- What steps should be taken to develop a plan for keeping and managing records?
- What professional practices should be used in child related programs?

COMPREHENSIVE STANDARD

Facilities
Management
and
Maintenance

- 5.0 Integrate knowledge, skills, and practices required for careers in facilities management and maintenance.**

CONTENT STANDARDS

- 5.1 Analyze career paths within the facilities management and maintenance areas.**
- 5.2 Demonstrate planning, organizing, and maintaining an efficient housekeeping operation.**
- 5.3 Demonstrate sanitation procedures for a clean and safe environment.**
- 5.4 Apply hazardous materials and waste management procedures.**
- 5.5 Demonstrate a work environment that provides safety and security.**
- 5.6 Demonstrate appropriate laundering processes.**
- 5.7 Demonstrate facilities management functions.**

References: Standards were developed in conjunction with:
(1) International Executive Housekeepers Association

FACILITIES MANAGEMENT AND MAINTENANCE

CONTENT STANDARD 5.1 Analyze career paths within the facilities management and maintenance areas.

COMPETENCIES

- 5.1.1 Determine the roles and functions of individuals engaged in facilities management and maintenance careers.
- 5.1.2 Explore opportunities for employment and entrepreneurial endeavors.
- 5.1.3 Examine education and training requirements and opportunities for career paths in facilities management and maintenance.
- 5.1.4 Examine the impact of facilities management and maintenance occupations on local, state, national, and global economies.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)

Mathematics

- Interprets charts, tables, and graphs (MA 174)

Science

- Uses computers for information processing (SC 499)

FACILITIES MANAGEMENT AND MAINTENANCE

PROCESS QUESTIONS 5.1

Thinking

- What careers are involved in the facilities management and maintenance industry? Why is the facilities management industry important to the community, country, and the world?
- What criteria can be used in a career selection?
- Why is it important to research careers in the facilities management and maintenance areas? What values support a career decision?

Communication

- What communication skills are necessary for a career in this field?
- What questions need to be answered in order to make a wise career selection?
- What are the consequences of selecting a career in the facilities management and maintenance field?

Leadership

- What leadership qualities are needed to be an entrepreneur in the facilities management and maintenance field?
- How do our leadership skills affect career success or failure?
- What are the implications of strong leadership in the field at the local, state, national, and global economics? a weak leadership?

PROCESS QUESTIONS (Continued)

Management

- What resources and training are required for a career in the facilities management and maintenance field?
- What personal factors affect career choices and goals in this industry?
- What might be the impact of long-term and short-term career goals on the individual? on the facilities and maintenance fields?

FACILITIES MANAGEMENT AND MAINTENANCE

CONTENT STANDARD 5.2 Demonstrate planning, organizing, and maintaining an efficient housekeeping operation.

COMPETENCIES

- 5.2.1 Design housekeeping standards and procedures. (1)
- 5.2.2 Operate cleaning equipment and tools.
- 5.2.3 Manage use of supplies.
- 5.2.4 Maintain building interior surfaces, wall coverings, fabrics, furnishings, and floor surfaces. (1)
- 5.2.5 Perform cleaning based on established standards. (1)
- 5.2.6 Design energy efficient methods.
- 5.2.7 Demonstrate quality services which exceed the expectations of customers. (1)

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

ACADEMIC PROFICIENCIES (Continued)

Mathematics

- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals (MA 1), (MA 2)
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, and calculate square root (MA 3)
- Mentally adds, subtracts, divides, and multiplies whole numbers (MA 4)
- Uses a calculator to add, subtract, divide, and multiply, calculate percentages, ratios (MA 5)
- Understands and applies basic methods of measurement (MA 6)
- Understands and applies advanced methods of measurement (MA 7)
- Precisely calculates areas, circumferences, perimeters, volume, and surface areas of geometric figures (MA 005, MA 006, MA 007, MA 008, MA 009, MA 014)
- Interprets charts, tables, and graphs (MA 174)
- Solves problems and generates conclusions using deductive reasoning (MA 229)
- Understands geometric figures using visual perception and line and angle relationships (MA 244, MA 245)
- Distinguishes characteristics of angles, circles, and arcs (MA 128)
- Measures angles (MA 180)
- Constructs lines, both parallel and perpendicular (MA112, MA114)

Science

- Knows the environmental impact of materials (solid, liquid, gaseous) (SC 2)

FACILITIES MANAGEMENT AND MAINTENANCE

PROCESS QUESTIONS 5.2

Thinking

- What procedures are needed when implementing housing operations?
- What factors should be considered when determining standards for cleaning?
- What are the consequences for the well-being of individual, families, and society when housekeeping operations do not meet customers needs? do not?

Communication

- What do we need to know to understand housekeeping operations?
- How can we ensure the procedures are clearly understood by everyone involved?
- In what ways does the use of communication contribute to efficient housekeeping operations?

Leadership

- What are our goals in operating a housekeeping facility?
- What are the guidelines for meeting the goals of operation?
- What should be done to facilitate planning, organizing, and maintaining an efficient housekeeping operation?

PROCESS QUESTIONS (Continued)

Management

- What procedures need to be implemented to accomplish the task of housekeeping?
- What resources and skills are required to perform the housekeeping task? What standards should be established?
- What are the consequences of not meeting the standards for housekeeping for an institution? a hotel? an office?

FACILITIES MANAGEMENT AND MAINTENANCE

CONTENT STANDARD 5.3 Demonstrate sanitation procedures for a clean and safe environment.

COMPETENCIES

- 5.3.1 Examine the various types of cleaning methods and their environmental effects. (1)
- 5.3.2 Examine federal and state regulations regarding the handling, use, and storage of chemicals. (1)
- 5.3.3 Apply Occupational Safety and Health Administration (OSHA) regulations to situations in which blood borne pathogens exist and need to be labeled.
- 5.3.4 Execute a pest control system appropriate for the facility.
- 5.3.5 Apply Centers for Disease Control (CDC) standards.
- 5.3.6 Apply the Americans with Disability Act (ADA) regulations.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)

ACADEMIC PROFICIENCIES (Continued)

- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

Mathematics

- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals (MA 1), (MA 2)
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, and calculate square root (MA 3)
- Mentally adds, subtracts, divides, and multiplies whole numbers (MA 4)
- Uses a calculator to add, subtract, divide, multiply, calculate percentages, ratios (MA 5)
- Understands and applies basic methods of measurement (MA 6)
- Understands and applies advanced methods of measurement (MA 7)
- Interprets charts, tables, and graphs (MA 174)
- Solves problems and generates conclusions using deductive reasoning (MA 229)
- Precisely calculates areas, circumferences, perimeters, volume, and surface areas of geometric figures (MA 005)

Science

- Knows the environmental impact of materials (solid, liquid, gaseous) (SC 2)

FACILITIES MANAGEMENT AND MAINTENANCE

PROCESS QUESTIONS 5.3

Thinking

- What regulations and standards need to be met?
- What criteria can be used to decide what regulations and standards apply?
- What might the consequences be for well-being of the individuals, families, and society when sanitation procedures do not provide a clean and safe environment?

Communication

- What organizations are responsible for regulating a clean and safe environment?
- How can we ensure the procedures are clearly understood by everyone involved?
- What are the consequences of communicating sanitation procedures to employees? not communicating?

Leadership

- How can we act as leaders to encourage sanitation procedure compliance?
- What actions should we take to guarantee sanitation procedures are followed according to required guidelines?
- What should be done to evaluate the sanitation procedures in the workplace? What ethical considerations are involved?

PROCESS QUESTIONS (Continued)

Management

- What are the sanitation standards to guide our performances in housekeeping?
- What criteria should be used to reach sanitation standard requirements?
- What are the possible consequences of meeting or not meeting sanitation standards?

FACILITIES MANAGEMENT AND MAINTENANCE

CONTENT STANDARD 5.4 Apply hazardous materials and waste management procedures.

COMPETENCIES

- 5.4.1 Carry out federal, state, and other regulations regarding waste management. (1)
- 5.4.2 Demonstrate a waste minimization plan. (1)
- 5.4.3 Practice a recycling program for conservation of resources. (1)
- 5.4.4 Record hazardous situations accurately and communicate to appropriate authorities. (1)
- 5.4.5 Determine procedures for safely handling and storing hazardous materials and waste products. (1)
- 5.4.6 Demonstrate safe disposals of pesticides. (1)

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)

ACADEMIC PROFICIENCIES (Continued)

- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media (LA 5)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

Mathematics

- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals (MA 1), (MA 2)
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, and calculate square root (MA 3)
- Mentally adds, subtracts, divides and multiplies whole numbers (MA 4)
- Uses a calculator to add, subtract, divide, and multiply, calculate percentages, ratios (MA 5)
- Understands and applies basic methods of measurement (MA 6)
- Understands and applies advanced methods of measurement (MA 7)
- Precisely calculates areas, circumferences, perimeters, volume, and surface areas of geometric figures (MA 005, MA 006, MA 007, MA 008, MA 009, MA 014)
- Interprets charts, tables, and graphs (MA 174)

Science

- Knows the environmental impact of materials (solid, liquid, gaseous) (SC 2)

FACILITIES MANAGEMENT AND MAINTENANCE

PROCESS QUESTIONS 5.4

Thinking

- What factors should be considered when eliminating waste?
- What factors will affect our decisions regarding waste disposal? environmental? social? political? economic?
- What choices should we advocate for individual, industry, and society when evaluating waste management procedures?

Communication

- What are the organization's responsibilities for regulating waste management?
- How can we ensure that procedures are understood by everyone involved?
- What are the consequences of not communicating waste management procedures to employees?

Leadership

- How can we act as leaders to encourage the use of waste management procedures?
- What actions should we take to guarantee waste management procedures are followed according to required guidelines?
- What should be done to facilitate waste management procedures in the workplace? What happens when procedures are efficiently followed?

PROCESS QUESTIONS (Continued)

Management

- What are the hazardous materials and waste management requirements to guide our performance in waste removal?
- What criteria should be used to reach hazardous material and waste management standard requirements?
- What are the possible consequences of meeting or not meeting the sanitation standards?

FACILITIES MANAGEMENT AND MAINTENANCE

CONTENT STANDARD 5.5 Demonstrate a work environment that provides safety and security.

COMPETENCIES

- 5.5.1 Design procedures for external and internal emergencies. (1)
- 5.5.2 Prepare security procedures. (1)
- 5.5.3 Demonstrate safe procedures in the use, care, and storage of equipment. (1)
- 5.5.4 Apply safety and security procedures as required by Occupational Safety and Health Administration (OSHA) and other agencies. (1)
- 5.5.5 Apply procedures for infection control. (1)
- 5.5.6 Examine concepts of epidemiology. (1)

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)

ACADEMIC PROFICIENCIES (Continued)

- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

Mathematics

- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals (MA 1), (MA 2)
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, and calculate square root (MA 3)
- Mentally adds, subtracts, divides, and multiplies whole numbers (MA 4)
- Uses a calculator to add, subtract, divide, and multiply, calculate percentages, ratios (MA 5)
- Understands and applies basic methods of measurement (MA 6)
- Understands and applies advanced methods of measurement (MA 7)
- Interprets charts, tables, and graphs (MA 174)
- Solves problems and generates conclusions using deductive reasoning (MA 229)
- Precisely calculates areas, circumferences, perimeters, volume, and surface areas of geometric figures (MA 005, MA 006, MA 007, MA 008, MA 009, MA 014)

Science

- Knows the environmental impact of materials (solid, liquid, gaseous) (SC 2)

FACILITIES MANAGEMENT AND MAINTENANCE

PROCESS QUESTIONS 5.5

Thinking

- What are the characteristics of a safe and secure work environment?
- What factors will affect our decisions about developing procedures?
- What are the consequences to the individual when safety and security procedures are not followed?

Communication

- How can we communicate safety and security procedures to employees?
- How can we ensure that safety and security procedures are clearly understood by everyone involved?
- How does communication contribute to safety and security of the work?

Leadership

- What safety and security skills do we need to model to others?
- What are the guidelines for meeting the goals of safety and security in the workplace?
- What should be done to inspire a clear vision of the importance of compliance with safety and security procedures?

PROCESS QUESTIONS (Continued)

Management

- What are the safety requirements to guide our activities?
- What criteria should be used to guide our activities?
- What are the long-term consequences for the industry when the guidelines for safety and security are followed?

FACILITIES MANAGEMENT AND MAINTENANCE

CONTENT STANDARD 5.6 Demonstrate appropriate laundering processes.

COMPETENCIES

- 5.6.1 Examine the functions of machines and equipment used in laundry operations.
- 5.6.2 Demonstrate laundry procedures.
- 5.6.3 Apply procedures for the selection of textiles, chemicals, and equipment associated with laundry. (1)
- 5.6.4 Apply regulations regarding laundry/linen systems. (1)

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

ACADEMIC PROFICIENCIES (Continued)

Mathematics

- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals (MA 1), (MA 2)
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, and calculate square root (MA 3)
- Mentally adds, subtracts, divides, and multiplies whole numbers (MA 4)
- Uses a calculator to add, subtract, divide, and multiply, calculate percentages, ratios (MA 5)
- Understands and applies basic methods of measurement (MA 6)
- Understands and applies advanced methods of measurement (MA 7)
- Interprets charts, tables, and graphs (MA 174)
- Solves problems and generates conclusions using deductive reasoning (MA 229)
- Precisely calculates areas, circumferences, perimeters, volume, and surface areas of geometric figures (MA 005, MA 006, MA 007, MA 008, MA 009, MA 014)

Science

- Knows the environmental impact of materials (solid, liquid, gaseous) (SC 2)
- Identifies acids and bases (SC 449)
- Describes and explains chemical reactions related to contamination (SC 512)

FACILITIES MANAGEMENT AND MAINTENANCE

PROCESS QUESTIONS 5.6

Thinking

- What procedures do we need to know to demonstrate appropriate laundering?
- What are the end results of appropriate laundering processes? What factors will affect our decisions? environment? society?
- What are the consequences of appropriate laundering processes?

Communication

- What do we need to know about laundering processes?
- How can we ensure the procedures are clearly understood by the worker?
- What are the consequences of not clearly understanding the procedures of laundering?

Leadership

- What skills do we need to convey concerning appropriate laundering?
- How can we encourage compliance of appropriate laundering processes?
- What should be done to encourage the implementation of appropriate laundering procedures?

PROCESS QUESTIONS (Continued)

Management

- What steps need to be taken to carry out laundry tasks?
- What criteria are established to assist us in meeting the expectations related to laundry tasks?
- What are the consequences of performing laundry tasks appropriately? performing tasks inappropriately?

FACILITIES MANAGEMENT AND MAINTENANCE

CONTENT STANDARD 5.7 Demonstrate facilities management functions.

COMPETENCIES

- 5.7.1 Demonstrate quality customer service which exceeds expectations. (1)
- 5.7.2 Examine the elements involved in staff planning, recruiting, interviewing, and selecting of employees. (1)
- 5.7.3 Design staff schedules (1)
- 5.7.4 Conduct orientation, regular training and education, and on-the-job training/retraining. (1)
- 5.7.5 Apply work measurement techniques. (1)
- 5.7.6 Apply principles of purchasing and receiving in facility management operations. (1)
- 5.7.7 Implement inventory procedures. (1)
- 5.7.8 Apply accounting principles in planning and forecasting profit and loss. (1)
- 5.7.9 Implement marketing plan. (1)

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)

ACADEMIC PROFICIENCIES (Continued)

- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

Mathematics

- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals (MA 1), (MA 2)
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, and calculate square root (MA 3)
- Mentally adds, subtracts, divides, and multiplies whole numbers (MA 4)
- Uses a calculator to add, subtract, divide, and multiply, calculate percentages, ratios (MA 5)
- Understands and applies basic methods of measurement (MA 6)
- Understands and applies advanced methods of measurement (MA 7)
- Interprets charts, tables, and graphs (MA 174)
- Solves problems and generates conclusions using deductive reasoning (MA 229)
- Precisely calculates areas, circumferences, perimeters, volume, and surface areas of geometric figures (MA 005, MA 006, MA 007, MA 008, MA 009, MA 014)

Science

- Knows the environmental impact of materials (solid, liquid, gaseous) (SC 2)

FACILITIES MANAGEMENT AND MAINTENANCE

PROCESS QUESTIONS 5.7

Thinking

- What skills are needed to manage a facility?
- What factors will affect our decisions about managing a facility? environmental? social? political? economic?
- What might be the consequences to the facility when effective management functions are used? to the customer?

Communication

- What do we need to know about facilities management?
- How can we apply this information to enhance management of the facility?
- In what way does the use of communication contribute to facilities management functions?

Leadership

- What leadership techniques do we need to know to be effective facilities managers?
- What criteria should be used to make management decisions?
- What do our actions as leaders mean to the employees? facility? customer? organization?

PROCESS QUESTIONS (Continued)

Management

What are the goals? What resources are required? What steps are needed to manage facility maintenance?

What criteria should be used to determine how to manage the facilities maintenance?

What are the consequences of implementing or not implementing procedures? Are there alternative actions that could be performed?

COMPREHENSIVE STANDARD

Family

- 6.0 Evaluate the significance of family and its impact on the well-being of individuals and society.**

CONTENT STANDARDS

- 6.1 Analyze the impact of family as a system on individuals and society.**
- 6.2 Demonstrate appreciation for diverse perspectives, needs, and characteristics of individuals and families.**

FAMILY

CONTENT STANDARD 6.1 Analyze the impact of family as a system on individuals and society.

COMPETENCIES	ACADEMIC PROFICIENCIES
<p>6.1.1 Examine family as the basic unit of society.</p> <p>6.1.2 Determine the role of family in transmitting societal expectations.</p> <p>6.1.3 Examine global influences on today's families.</p> <p>6.1.4 Examine the role of family in teaching culture and traditions across the life span.</p> <p>6.1.5 Examine the role of family in developing independence, interdependence, and commitment of family members.</p> <p>6.1.6 Determine the impact of change and transitions over the life course.</p> <p>6.1.7 Explore the ways family and consumer sciences careers assist the works of the family.</p>	<p>Language Arts</p> <ul style="list-style-type: none">• Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)• Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)• Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)• Demonstrates competence in speaking to provide, distribute, or find information (LA 4)• Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

PROCESS QUESTIONS 6.1

Thinking

- What is the role of the family in society today? In what ways have roles within the family changed? What factors have caused these changes in the family?
- What factors will affect family systems? social? cultural? political? environmental?
- What alternatives can family members create to have a positive effect upon family and society? What actions can family members take to instill the societal skills of communication, education, and role expectations in family members? What would happen if families did not instill these skills?

Communication

- What is the importance of communication in the family? How has it changed over time?
- What are the consequences of the changes in family communication upon society? What societal forces brought about change in family communication?
- What will be the consequences of improved family communications for individuals? family? community? nation? world? short-term? long-term? positive? negative? What are the consequences (positive and negative) of analyzing the development of families in different cultures?

PROCESS QUESTIONS (Continued)

Leadership

- What leadership techniques are needed to achieve family goals?
- How do we know if family members are listening actively, with understanding, and empathizing with each other? How is conflict handled in the family?
- What should families do to facilitate consensus building to solve problems? What existing beliefs, actions, or conditions create limits for achieving good leadership in the family? What impact could this have on society?

Management

- What steps do we need to take in the family to improve the well-being of individuals and society?
- How do the actions of one family member affect others? How can we manage the family to improve the well-being of individuals and society?
- What are the possible long-term consequences (positive and negative) of these actions?

FAMILY

CONTENT STANDARD 6.2 Demonstrate appreciation for diverse perspectives, needs, and characteristics of individuals and families.

COMPETENCIES	ACADEMIC PROFICIENCIES
<p>6.2.1 Demonstrate awareness of multiple diversities and their impact on individuals and families.</p> <p>6.2.2 Examine the impact of cultural diversity on individuals and families.</p> <p>6.2.3 Examine the impact of empathy for diversity on individuals in family, work, and community settings.</p> <p>6.2.4 Demonstrate respect for diversity with sensitivity to anti-bias, gender, equity, age, culture, and ethnicity.</p> <p>6.2.5 Examine the impact of the global village on the need to appreciate diversity.</p>	<p>Language Arts</p> <ul style="list-style-type: none">• Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)• Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)• Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)• Demonstrates competence in speaking to provide, distribute, or find information (LA 4)• Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

PROCESS QUESTIONS 6.2

Thinking

- What are the perspectives of our family members?
- What values, beliefs, and goals do others from different perspectives have?
- How can differing perspectives contribute to personal and family relationships?

Communication

- How can we gain an understanding of others' perspectives, needs, and characteristics?
- What new meanings or insights have we become aware of?
- What are the consequences of empathetic active listening on personal and family relationships?

Leadership

- What are our goals in working with different people?
- How do we know if we are accurately empathizing with others' perspectives?
- What are the consequences of understanding diverse perspectives?

PROCESS QUESTIONS (Continued)

Management

- What resources are available to help us understand diverse perspectives, needs, and characteristics of others?
- How can we use this information to improve relationships?
- What are the short-term and long-term consequences of understanding diverse perspectives on families? society?

COMPREHENSIVE STANDARD

Family and
Community
Services

- 7.0 Integrate knowledge, skills, and practices required for careers in family and community services.**

CONTENT STANDARDS

- 7.1 Analyze career paths within family and community services. (1)**
- 7.2 Analyze factors related to providing family and community services. (1)**
- 7.3 Demonstrate professional behaviors, skills, and knowledge in providing family and community services. (1)**
- 7.4 Evaluate conditions affecting individuals and families with a variety of disadvantaging conditions. (1)**
- 7.5 Identify services for individuals and families with a variety of disadvantaging conditions. (1)**

- (1) Aligns with The Community Support Skill Standards: Tools for Managing Change and Achieving Outcomes (Skill Standards for Direct Service Workers in the Human Services)**

FAMILY AND COMMUNITY SERVICES

CONTENT STANDARD 7.1 Analyze career paths within family and community services. (1)

COMPETENCIES	ACADEMIC PROFICIENCIES
<p>7.1.1 Determine the roles and functions of individuals engaged in family and community service careers.</p> <p>7.1.2 Explore opportunities for employment and entrepreneurial endeavors.</p> <p>7.1.3 Examine education and training requirements and opportunities for career paths in family and community services.</p> <p>7.1.4 Examine the impact of family and community service occupations on local, state, national, and global economies.</p>	<p>Language Arts</p> <ul style="list-style-type: none">• Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)• Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)• Demonstrates competence in speaking to provide, distribute, or find information (LA 4) <p>Mathematics</p> <ul style="list-style-type: none">• Interprets charts, tables, and graphs (MA 174) <p>Science</p> <ul style="list-style-type: none">• Uses computers for information processing (SC 499)

FAMILY AND COMMUNITY SERVICES

PROCESS QUESTIONS 7.1

Thinking

- What information do we need for choosing a career?
- What criteria can be used to help us decide on a career path?
- Is the information we gathered about careers relevant and related to career choices?

Communication

- What communication skills are needed to research potential careers?
- What questions should we ask to determine entrepreneurial opportunities in a career?
- How can we work with others to research possible careers?

Leadership

- What steps do we need to take in order to reach career goals?
- How do we know that we are choosing a career path that will benefit the family?
- What should be done to assess the impact of family and community service occupations on the local, state, national, and global economies?

PROCESS QUESTIONS (Continued)

Management

- What factors can be used when setting career goals?
- What personal factors will influence employment opportunities?
- What criteria should be used to evaluate the best career path?

FAMILY AND COMMUNITY SERVICES

CONTENT STANDARD 7.2 Analyze factors related to providing family and community services. (1)

COMPETENCIES

- 7.2.1 Examine local, state, and national agencies and informal support resources providing human services. (1)
- 7.2.2 Determine professional, ethical, legal, and safety issues that confront human service employees. (1)
- 7.2.3 Examine licensing laws and regulations that affect service providers and their participants. (1)
- 7.2.4 Determine harmful, fraudulent, and deceptive human service practices. (1)
- 7.2.5 Determine the rights and responsibilities of human service participants and their families. (1)
- 7.2.6 Determine effective individual and family advocacy and self-advocacy strategies to overcome diverse challenges facing human service participants. (1)
- 7.2.7 Explore community-networking opportunities in family and community services. (1)

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short and with limited categories of information and directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using different information sources, including informational texts or those of a technical nature, to accomplish specific tasks (LA 2)
- Demonstrates competence in writing, editing, and proofing reports, summaries, and documentation using correct English spelling, grammar, and punctuation (LA 3)
- Demonstrates competence in speaking for information gathering and distribution (LA 4)
- Adapts listening strategies to utilize verbal and nonverbal content of the communication (LA 6)

Science

- Applies and uses maps, charts, tables, and graphs to complete tasks (SC 042)

FAMILY AND COMMUNITY SERVICES

PROCESS QUESTIONS 7.2

Thinking

- How can we identify reliable information related to human services safety issues?
- What factors should be considered when creating networking opportunities between family and community services?
- What are the consequences of deceptive human service practices on the family? community?

Communication

- How can we express our concerns about ethical practices used in community service programs?
- How can analyzing human service practices change our perspective of our community?
- How can working with others help decrease harmful, deceptive or fraudulent community services?

Leadership

- How can an employer encourage professionalism?
- How might a person's values interfere with making professional or ethical decisions in a service?
- How should we confront a community which acts in an unprofessional or unethical way?

PROCESS QUESTIONS (Continued)

Management

- What resources are needed to analyze harmful and deceptive human service practices?
- If all people chose to act ethically, how would this affect families, community, and the workplace?
- How would role playing help us examine the implications of professional, ethical, legal, and safety practices in human services?

FAMILY AND COMMUNITY SERVICES

CONTENT STANDARD 7.3 Demonstrate professional behaviors, skills, and knowledge in providing family and community services. (1)

COMPETENCIES	ACADEMIC PROFICIENCIES
<p>7.3.1 Utilize rules, regulations, and work site policies that affect employer, employee, participant, and family rights and responsibilities. (1)</p> <p>7.3.2 Demonstrate professional, collaborative relationships with colleagues, support teams, participants, and families. (1)</p> <p>7.3.3 Maintain accurate and confidential documentation to be submitted in a timely manner to appropriate sources. (1)</p> <p>7.3.4 Examine participants' strengths, needs, preferences, and interests across the life span through formal and informal assessment practices. (1)</p> <p>7.3.5 Demonstrate use of technology in human services. (1)</p>	<p>Language Arts</p> <ul style="list-style-type: none">• Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)• Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)• Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)• Demonstrates competence in speaking to provide, distribute, or find information (LA 4)• Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6) <p>Science</p> <ul style="list-style-type: none">• Uses computers for information processing (SC 499)

FAMILY AND COMMUNITY SERVICES

PROCESS QUESTIONS 7.3

Thinking

- What are the goals for working cooperatively in groups?
- What criteria can be used to help decide professional behavior?
- What beliefs, actions or conditions create limits for demonstrating professional behavior in the community? workplace?

Communication

- How can we communicate the importance of professional behavior, skills, and knowledge?
- What would be the consequences for not communicating rules, regulations, and policies in the workplace? community?
- What factors will affect our decisions to act professionally?

Leadership

- What skills are needed to work cooperatively with others?
- How do we know if we are applying reasoning and problem solving to human services?
- What can be done to inspire a clear vision of professionalism?

PROCESS QUESTIONS (Continued)

Management

- What happens if we disregard rules, regulations, and policies in the workplace?
- What criteria would we use to determine a person's level of professionalism?
- What might be the long-term consequences of identifying professional resources to be used in the workplace? families? community?

FAMILY AND COMMUNITY SERVICES

CONTENT STANDARD 7.4 Evaluate conditions affecting individuals and families with a variety of disadvantaging conditions. (1)

COMPETENCIES	ACADEMIC PROFICIENCIES
<p>7.4.1 Assess health, wellness, and safety issues of individuals and families with a variety of disadvantaging conditions. (1)</p> <p>7.4.2 Determine management and living environment issues of individuals and families with a variety of disadvantaging conditions. (1)</p> <p>7.4.3 Research personal, social, emotional, economical, vocational, educational, and recreational issues for individuals and families with a variety of disadvantaging conditions. (1)</p> <p>7.4.4 Discriminate between situations that require personal prevention or intervention and those situations that require professional assistance. (1)</p> <p>7.4.5 Determine situations which require crisis intervention. (1)</p> <p>7.4.6 Determine the appropriate support needed to address selected human service issues. (1)</p>	<p>Language Arts</p> <ul style="list-style-type: none">• Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)• Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)• Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)• Demonstrates competence in speaking to provide, distribute, or find information (LA 4)• Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6) <p>Science</p> <ul style="list-style-type: none">• Analyzes drugs impact on society (SC 002)

FAMILY AND COMMUNITY SERVICES

PROCESS QUESTIONS 7.4

Thinking

- What are disadvantaging conditions?
- Why is it important to know about disadvantaging conditions?
- Whose interests are served by understanding disadvantaging conditions?

Communication

- How can we communicate information about disadvantaging conditions?
- What insights do we have into dealing with disadvantaging conditions?
- In what ways does the use of communication contribute to improvement of life style of those who have disadvantaging conditions?

Leadership

- What skills do we need to relate to others who have disadvantaging conditions?
- How do we know if we are effectively informing others of management and living environment issues of individuals and families that live with disadvantaging conditions?
- What should be done to educate individuals on implementing a crisis intervention plan?

PROCESS QUESTIONS (Continued)

Management

- What resources do we need to reach our goal of people with disadvantaging conditions?
- What resources do we have that might help us determine how to manage the living environment of a person with a disadvantaging condition?
- What are the consequences of using resources to develop a crisis intervention plan?

FAMILY AND COMMUNITY SERVICES

CONTENT STANDARD 7.5 Identify services for individuals and families with a variety of disadvantaging conditions. (1)

COMPETENCIES

- 7.5.1 List needs and accommodations for people with a variety of disadvantaging conditions. (1)
- 7.5.2 State ways in which individuals affect the family financially, socially, and emotionally with a variety of disadvantaging conditions. (1)
- 7.5.3 Cite coping or adjustment strategies and stress management practices for the participant, a caregiver, and family members. (1)
- 7.5.4 Highlight the importance of friends, family, and community relationships for an individual with a variety of disadvantaging conditions. (1)
- 7.5.5 Give support that validates the participant's capabilities and right to privacy, dignity, and autonomy. (1)
- 7.5.6 Give participants strategies to make informed choices, access resources and support, follow through on responsibilities, and take appropriate risks. (1)
- 7.5.7 List verbal and nonverbal communication skills related to advising and counseling individuals and families with a variety of disadvantaging conditions. (1)

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

Science

- Analyzes drugs impact on society (SC 002)

PROCESS QUESTIONS 7.5

Thinking

- What contextual factors should be considered when determining needs for people with disadvantaging conditions?
- What factors will affect our decisions on evaluating accommodations of those with disadvantaging conditions?
- What choices should we advocate for families with disadvantaging conditions when providing support that validates dignity?

Communication

- How can we communicate ways a family is affected financially, socially, and emotionally when living with a family member who has a disadvantaging condition?
- What questions do we ask in order to evaluate stress management techniques for families?
- What would be the consequences of modeling verbal and nonverbal communication skills when counseling or advising families?

Leadership

- What skills are needed to assist people with disadvantaging conditions?
- How can we develop a strategy to manage conflict between the caregiver and the person with a disadvantaging condition?
- What would happen in a family if the needs for the member with a disadvantaging condition were not met?

PROCESS QUESTIONS (Continued)

Management

- What happens if we disregard the right to privacy of a person with a disadvantaging condition?
- What criteria would we use to determine proper adjustment strategies for a caregiver? family? participants?
- What would be the short and long-term consequences of not considering needs and accommodations for those with disadvantaging conditions?

COMPREHENSIVE STANDARD

Food Production
and Services

- 8.0 Integrate knowledge, skills, and practices required for careers in food production and services.**

CONTENT STANDARDS

- 8.1 Analyze career paths within the food production and food services industries.**
- 8.2 Demonstrate food safety and sanitation procedures.**
- 8.3 Demonstrate selecting, using, and maintaining food production equipment.**
- 8.4 Demonstrate planning menu items based on standardized recipes to meet customer needs.**
- 8.5 Demonstrate commercial preparation for all menu categories to produce a variety of food products.**
- 8.6 Demonstrate implementation of food service management functions.**
- 8.7 Demonstrate the concept of internal and external customer service.**

- References:** Some materials were reviewed by industry representatives and abstracted from sets of standards from the following organizations:
- (1) Dietary Managers Association
 - (2) American Dietetics Association
 - (3) National Restaurant Association, ProStart Program
 - (4) American Culinary Federation
 - (5) United States Food and Drug Administration, Center for Food Safety and Applied Nutrition
 - (6) Careers through Culinary Arts Program (C-CAP)

FOOD PRODUCTION AND SERVICES

CONTENT STANDARD 8.1 Analyze career paths within the food production and food service industries.

COMPETENCIES

- 8.1.1 Determine the roles and functions of individuals engaged in food production and services careers.
- 8.1.2 Explore opportunities for employment and entrepreneurial endeavors.
- 8.1.3 Examine education and training requirements and opportunities for career paths in food production and services.
- 8.1.4 Examine the impact of food production and services occupations on local, state, national, and global economies.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)

Mathematics

- Interprets charts, tables, and graphs (MA 174)

Science

- Uses computers for information processing (SC 499)

FOOD PRODUCTION AND SERVICES

PROCESS QUESTIONS 8.1

Thinking

- What careers are involved in the food production and food service industry?
- What criteria can be used in career selection?
- Why is it important to research careers in the food industry? What values support our career decisions?

Communication

- What communication skills are necessary for a career in this field?
- What questions need to be answered in order to make a wise career selection?
- What are the consequences of selecting a career in the food production and food service industry?

Leadership

- What leadership qualities are needed to be an entrepreneur in the food production and food service industry?
- How do our leadership skills affect career entrepreneur success or failure?
- What strategies would bring about desirable change in the public's perception of food production and food service employees?

PROCESS QUESTIONS (Continued)

Management

- What resources and training are required for a career in the food production and food service industry?
- What personal factors affect our career choices and goals in this industry?
- What might be the impact of employees' long-term and short-term career goals on the food production and food service industry?

FOOD PRODUCTION AND SERVICES

CONTENT STANDARD 8.2 Demonstrate food safety and sanitation procedures.

COMPETENCIES	ACADEMIC PROFICIENCIES
<p>8.2.1 Determine pathogens found in food and their role in causing illness. (5)(3)</p> <p>8.2.2 Employ food service management safety/sanitation program procedures. (3)</p> <p>8.2.3 Use knowledge of systems for documenting, investigating, and reporting food borne illness. (3)(5)</p> <p>8.2.4 Use the Hazard Analysis Critical Control Point (HACCP) principles and procedures during food handling processes to minimize the risks of food borne illness. (4)(3)</p> <p>8.2.5 Practice good personal hygiene/health procedures, and report symptoms of illness. (4)(5)(3)(6)</p> <p>8.2.6 Demonstrate proper receiving and storage of both raw and prepared foods. (4)(3)(6)</p> <p>8.2.7 Demonstrate food handling and preparation techniques that prevent cross contamination between raw and ready-to-eat foods and between animal or fish sources and other food products. (5)(3)</p> <p>8.2.8 Examine current types and proper uses of cleaning materials and sanitizers. (4)(3)</p>	<p>Language Arts</p> <ul style="list-style-type: none"> • Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2) • Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3) • Demonstrates competence in speaking to provide, distribute, or find information (LA 4) • Follows written and oral directions to complete tasks (LA 035, LA 132, LA 278) <p>Mathematics</p> <ul style="list-style-type: none"> • Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals (MA 1), (MA 2) • Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, and calculate square root (MA 3) • Mentally adds, subtracts, divides, and multiplies whole numbers (MA 4) • Uses a calculator to add, subtract, divide, and multiply, calculate percentages, ratios (MA 5) • Measures time, temperature, volume, and weight (MA 182, MA 183, MA 184, MA 185) • Converts word problems to mathematical expressions (MA 127) • Uses inductive and deductive reasoning to solve problems (MA 130) • Distinguishes proportions and congruence (MA 133) • Identifies the application of statistical processes (MA 173)
Continued on Page 124	Continued on Page 124

FOOD PRODUCTION AND SERVICES

PROCESS QUESTIONS 8.2

Thinking

- What procedures are needed to ensure food safety and sanitation?
- What factors will affect our decisions in evaluating food safety and sanitation procedures?
- What choices should we advocate for individuals, families, and society when evaluating food safety and sanitation procedures in order to meet health and safety procedures?

Communication

- What organizations are responsible for regulating food safety and sanitation procedures?
- How can we ensure that procedures are clearly understood by everyone involved in food safety and sanitation?
- What are the consequences of not communicating food safety and sanitation procedures to employees?

Leadership

- How can we act as leaders to set goals to follow food safety and sanitation procedures?
- What actions should we take to guarantee food safety and sanitation procedures are followed according to required guidelines?

PROCESS QUESTIONS (Continued)

- What should be done to facilitate food safety and sanitation procedures in the workplace? What happens when food safety and sanitation practices are effectively followed? What are the ethical considerations?

Management

- What steps do we need to take to ensure proper food safety and sanitation procedures are followed?
- What criteria are needed to develop a plan for following food safety and sanitation procedures?
- What might be the consequences for the individual, family, and society (positive and negative) of how we manage food safety and sanitation procedures?

FOOD PRODUCTION AND SERVICES

CONTENT STANDARD 8.2 Demonstrate food safety and sanitation procedures.

COMPETENCIES (Continued)

- 8.2.9 Use Occupational Safety and Health Administration's (OSHA) Right to Know Law and Material Safety Data Sheets (MSDS) and explain their requirements in handling hazardous materials. (4)(3)
- 8.2.10 Demonstrate waste disposal and recycling methods. (4)(3)(6)
- 8.2.11 Demonstrate ability to maintain necessary records to document time and temperature control, employee health, maintenance of equipment, and other elements of food preparation, storage, and presentation. (5)(3)

ACADEMIC PROFICIENCIES (Continued)

Science

- Knows the environmental impact of materials (solid, liquid, gaseous) (SC 2)
- Understands the effect of chemicals on humans and plants (SC 3)
- Understands the interaction of organisms with their environment (SC 5)
- Applies and uses laboratory techniques safely (SC 041)
- Applies and uses maps, charts, tables and graphs to complete tasks (SC 042)
- Applies and uses scientific methods to solve problems (SC 044)
- Converts measurement units from metric to English and metric (SC 052)
- Describes and explains heat conduction/convection, insulation requirements, radiant heating, and temperature (SC 273, SC 274, SC 280, SC 281, SC 282)
- Measures weight, temperature, time and the volumes of liquids and solids (SC 493, SC 495, SC 496, SC 497)
- Describes the immune system, the digestive system, selected diseases, and causes of weight gain and loss (SC 290, SC 291, SC 297, SC 309)
- Describes and explains pulleys and levers as work saving devices (SC 447, SC 448)
- Uses computers for information processing (SC 499)

FOOD PRODUCTION AND SERVICES

CONTENT STANDARD 8.3 Demonstrate selecting, using, and maintaining food production equipment.

COMPETENCIES

- 8.3.1 Operate tools and equipment following safety procedures and OSHA requirements. (1)(3)(4)(6)
- 8.3.2 Maintain tools and equipment following safety procedures and OSHA requirements. (1)(3)(4)
- 8.3.3 Demonstrate procedures for cleaning and sanitizing equipment. (3)
- 8.3.4 Examine efficiency of equipment purchases based on long-term business needs, specific regulations, and codes related to foods. (3)(5)
- 8.3.5 Demonstrate procedures for storage of equipment and tools. (3)

ACADEMIC PROFICIENCIES

Language Arts

- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Follows written and oral directions to complete tasks (LA 035, LA 132, LA 278)
- Informally discusses, requests, and supplies information to associates (LA 121, LA 265, LA 266, LA 276)

ACADEMIC PROFICIENCIES (Continued)

Mathematics

- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals (MA 1), (MA 2)
- Uses a calculator to add, subtract, divide, multiply, whole and mixed numbers, decimals, and calculate square root (MA 3)
- Mentally adds, subtracts, divides, and multiplies whole numbers (MA 4)
- Uses a calculator to add, subtract, divide, and multiply, calculate percentages, ratios (MA 5)
- Uses a calculator or computer to manipulate formulas (MA 264)

Science

- Applies and uses laboratory techniques safely (SC 041)
- Applies and uses maps, charts, tables and graphs to complete tasks (SC 042)
- Converts measurement units from metric to English and metric (SC 052)
- Describes and explains chemical reactions including inhibitors (SC 114, SC 121)
- Describes and explains heat conduction/convection, insulation requirements, radiant heating, temperature, and converts Fahrenheit to centigrade and vice versa (SC 273, SC 274, SC 280, SC 281, SC 282, SC 495)
- Describes and explains the energy conversion process (SC 232)
- Measures weight (SC 493)
- Measures time to complete a task (SC 496)
- Uses computers for information processing (SC 499)
- Describes and explains pulleys and levers as work saving devices (SC 447, SC 448)

PROCESS QUESTIONS 8.3

Thinking

- What information is needed for the selection of food service equipment?
- What type of equipment is needed for efficient, safe, and economical food production?
- What contradictions exist between the way things are and the way they should be in selection of food production equipment?

Communication

- What are the present safety procedures and requirements for operating and maintaining food production equipment?
- Why is it important to follow safety procedures and requirements when selecting and using food production equipment?
- Whose interests are served with these food safety procedures and requirements?

Leadership

- What skills do we need to select, use, and maintain food production tools and equipment?
- What criteria should be developed for cleaning and sanitizing food production equipment?
- What would be the implications for employee, employer, customer, and community of not following cleaning and sanitizing guidelines?

PROCESS QUESTIONS (Continued)

Management

- What reliable resources are needed for selecting efficient, safe, and economical equipment?
- What would be the consequences of selecting equipment that is efficient, safe, and economical? for the employee? employer? customers? economy?
- What is the impact of equipment selection on food production? economical impact? environmental impact?

FOOD PRODUCTION AND SERVICES

CONTENT STANDARD 8.4 Demonstrate planning menu items based on standardized recipes to meet customer needs.

COMPETENCIES

- 8.4.1 Use computer based menu systems. (3)
- 8.4.2 Apply menu-planning principles to develop and modify menus. (3)(4)
- 8.4.3 Examine food and equipment needed for menus.
- 8.4.4 Do menu layout and design. (3)
- 8.4.5 Prepare requisitions for production requirements. (4)
- 8.4.6 Record performance of menu items. (3)

ACADEMIC PROFICIENCIES

Language Arts

- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Follows written and oral directions to complete tasks (LA 035, LA 132, LA 278)

ACADEMIC PROFICIENCIES (Continued)

Mathematics

- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals (MA 1), (MA 2)
- Uses a calculator to add, subtract, divide, multiply, whole and mixed numbers, decimals, and calculate square root (MA 3)
- Mentally adds, subtracts, divides, and multiplies whole numbers (MA 4)
- Uses a calculator to add, subtract, divide, and multiply, calculate percentages, ratios (MA 5)
- Uses a calculator or computer to manipulate formulas (MA 264)

Science

- Applies and uses laboratory techniques safely (SC 041)
- Applies and uses maps, charts, tables and graphs to complete tasks (SC 042)
- Applies and uses scientific methods to solve problems (SC 044)
- Converts measurement units from metric to English and metric (SC 052)
- Measures temperature using Fahrenheit and centigrade scales (SC 495)
- Measures time to complete a task (SC 496)
- Uses computers for information processing (SC 499)

FOOD PRODUCTION AND SERVICES

PROCESS QUESTIONS 8.4

Thinking

- What contextual factors should be considered when preparing and serving foods to meet the customer's needs?
- What factors will affect our decisions about preparing and serving foods to meet customer needs? economically? socially? culturally? nutritionally?
- What might be the consequences for well-being of the individual, families, and societies when foods are not prepared and served to meet customer needs?

Communication

- What do we need to know about understanding customer needs when preparing foods using standardized recipes?
- What questions do we need to ask to determine customer needs?
- What ethical issues are involved in meeting customer needs?

Leadership

- What are our goals in planning menus to meet customer needs?
- What are the guidelines for meeting the goals of menu planning and customer needs?
- What should be done to inspire a clear vision of the importance of preparing and serving foods to meet customer needs?

PROCESS QUESTIONS (Continued)

Management

- What resources do we have for planning, developing and modifying menus to meet customer needs?
- What criteria should be used to decide menu layout and design when meeting customer needs?
- What if everyone in the industry followed this standard? What are the consequences of standardization for us? customer?

FOOD PRODUCTION AND SERVICES

CONTENT STANDARD 8.5 Demonstrate commercial preparation for all menu categories to produce a variety of food products.

COMPETENCIES	ACADEMIC PROFICIENCIES
8.5.1 Demonstrate skills in knife, tool, and equipment handling. (4)(3)(6)	Language Arts <ul style="list-style-type: none"> • Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1) • Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2) • Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6) • Informally discusses, requests, and supplies information to associates (LA 265, LA 266, LA 267)
8.5.2 Demonstrate a variety of cooking methods including roasting and baking, broiling, smoking, grilling, sautéing, frying, deep frying, braising, stewing, poaching, steaming, wokking, convection, microwaving, and other emerging technologies. (4)(3)	Mathematics <ul style="list-style-type: none"> • Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals (MA 1), (MA 2) • Uses a calculator to add, subtract, divide, multiply, whole and mixed numbers, decimals, and calculate square root (MA 3) • Mentally adds, subtracts, divides, and multiplies whole numbers (MA 4) • Uses a calculator to add, subtract, divide, and multiply, calculate percentages, ratios (MA 5) • Understands and applies basic methods of measurement (MA 6) • Understands and applies advanced methods of measurement (MA 7) • Calculates and evaluates algebraic expressions; and solves problems and generates conclusions using deductive reasoning (MA 001, MA 229)
8.5.3 Utilize weights and measures to demonstrate proper scaling and measurement techniques. (4)(3)	
8.5.4 Apply the fundamentals of time and temperature to cooking, cooling, and reheating of a variety of foods. (5)(3)	
8.5.5 Prepare various meats, seafood, and poultry. (4)(3)	
8.5.6 Prepare various stocks, soups, and sauces. (4)(3)	
8.5.7 Prepare various fruits, vegetables, starches, and farinaceous items. (4)(3)	
8.5.8 Prepare various salads, dressings, marinades, and spices. (4)(3)	
8.5.9 Prepare sandwiches, canapés, and appetizers. (4)(3)	
8.5.10 Prepare baked goods and desserts. (3)	
<i>Continued on Page 132</i>	<i>Continued on Page 132</i>

PROCESS QUESTIONS 8.5

Thinking

- What factors should be considered when preparing food products?
- What factors will affect our decisions about food product preparation?
- What actions can we create that meet our goals and standards in preparing food products?

Communication

- What are food preparation choices?
- What criteria can be used to help decide what food preparation techniques are best when preparing food products?
- What are the consequences of preparing foods using a variety of methods?

Leadership

- What skills do we need to prepare food products?
- How do we communicate these skills to others effectively?
- What are the consequences (positive and negative) of food preparation choices?

Management

- What resources do we need when preparing food products?
- What criteria should be used in determining food preparation processes?
- What is the best action to take preparing food products economically? nutritionally?

FOOD PRODUCTION AND SERVICES

CONTENT STANDARD 8.5 Demonstrate commercial preparation for all menu categories to produce a variety of food products.

COMPETENCIES (Continued)

- 8.5.11 Prepare breakfast meats, eggs, cereals, and batter products. (4)(3)
- 8.5.12 Demonstrate food presentation techniques. (4)(3)
- 8.5.13 Examine the applicability of convenience food items. (4)(3)

ACADEMIC PROFICIENCIES (Continued)

Science

- Applies and uses laboratory techniques safely (SC 041)
- Applies and uses maps, charts, tables and graphs to complete tasks (SC 042)
- Applies and uses scientific methods to solve problems (SC 044)
- Converts measurement units from metric to English and metric (SC 052)
- Describes and explains chemical reactions including inhibitors (SC 114, SC 121)
- Describes and explains heat conduction/convection, insulation requirements, radiant heating, temperature; converts Fahrenheit to centigrade and vice versa (SC 273, SC 274, SC 280, SC 281, SC 282, SC 495)
- Measures time to complete a task (SC 496)
- Measure the volumes of liquids and solids (SC 497)
- Use computers for information processing (SC 499)

FOOD PRODUCTION AND SERVICES

CONTENT STANDARD 8.6 Demonstrate implementation of food service management functions.

COMPETENCIES

- 8.6.1 Apply principles of purchasing and receiving in food service operations. (4)(3)
- 8.6.2 Practice inventory procedures including first in/first out concept, date markings, and specific record keeping. (5).
- 8.6.3 Apply accounting principles in planning and forecasting profit and loss.
- 8.6.4 Examine the areas of legal liability within the food service industry.
- 8.6.5 Verify human resource policies including rules, regulations, laws, and hiring/compensation/overtime.
- 8.6.6 Apply the procedures involved in staff planning, recruiting, interviewing, selecting, and scheduling of employees.
- 8.6.7 Conduct staff orientation, regular training and education, and on-the-job training/retraining.
- 8.6.8 Implement marketing plan for food service operations.
- 8.6.9 Design internal/external disaster plan.

ACADEMIC PROFICIENCIES

Language Arts

- Applies reading process, strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, vocabulary (LA 1)

ACADEMIC PROFICIENCIES (Continued)

- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

Mathematics

- Mentally, manually, and by calculator, adds, subtracts, divides, multiplies whole and mixed numbers, fractions, decimals; calculates square root, percentages, and formulas (MA 1),(MA 2),(MA 3), (MA 4),(MA 5)
- Understands and applies basic and advanced methods of measurement (MA 6), (MA 7)
- Calculates and evaluates algebraic expressions; and solves problems and generates conclusions using deductive reasoning (MA 001, MA 229)

Science

- Knows effect of chemicals on humans and plants (SC 3)
- Analyzes and evaluates environmental issues related to waste management (SC 012)
- Applies and uses laboratory techniques safely (SC 041)
- Applies and uses maps, charts, tables and graphs to complete tasks (SC 042)
- Applies and uses scientific methods to solve problems (SC 044)
- Converts measurement units from metric to English and metric (SC 052)
- Describes and explains heat conduction/convection, insulation requirements, radiant heating, temperature, and converts Fahrenheit to centigrade and vice versa (SC 273, SC 274, SC 280, SC 281, SC 282, SC 495)
- Measures time to complete a task (SC 496)
- Measure the volumes of liquids and solids (SC 497)

FOOD PRODUCTION AND SERVICES

PROCESS QUESTIONS 8.6

Thinking

- What are food service management functions?
- What is the value of food service management functions?
- Whose interests are being served with food service management functions?

Communication

- How can we communicate effectively in the food service industry?
- Why is it important to communicate food service management functions?
- How do we eliminate or minimize the roadblocks to communication within the food service industry?

Leadership

- What skills do we need to relate to others in planning food service management functions?
- How would we resolve conflicts relating to food service management functions?
- How would we work collaboratively with others to achieve food service management functions?

PROCESS QUESTIONS (Continued)

Management

- What steps should be taken to implement food service management functions?
- What criteria should be used to determine food service management functions?
- What if everyone implemented food service management functions? Whose interests are served?

FOOD PRODUCTION AND SERVICES

CONTENT STANDARD 8.7 Demonstrate the concept of internal and external customer service.

COMPETENCIES	ACADEMIC PROFICIENCIES
<p>8.7.1 Examine the role of service as a strategic component of performance. (3)</p> <p>8.7.2 Demonstrate quality services which exceed the expectations of customers. (2)(4)(3)</p> <p>8.7.3 Examine the relationship between employees and customer satisfaction. (3)</p> <p>8.7.4 Apply strategies for resolving complaints.</p> <p>8.7.5 Demonstrate sensitivity to diversity and individuals with special needs.</p>	<p>Language Arts</p> <ul style="list-style-type: none">• Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)• Demonstrates competence in speaking to provide, distribute, or find information (LA 4)• Demonstrates competence in making oral formal and informal presentations, including selecting and using media (LA 5)• Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

FOOD PRODUCTION AND SERVICES

PROCESS QUESTIONS 8.7

Thinking

- What are the contextual factors involved in internal and external customer service?
- What is the dominant point of view regarding internal and external customer service?
- Whose interests are served with the concept of internal and external customer service? What are the consequences of not following the guidelines for internal and external customer service?

Communication

- What communication skills are needed to ensure success in internal and external customer service interactions?
- How do we communicate effectively when working with customers in the food production and services industry?
- What are the consequences of communication (positive and negative) with internal and external customers in the food production and services industry?

Leadership

- How can we act as leaders to set goals for working with internal and external customer relations?
- How do our actions as leaders affect the outcomes of internal and external customer relations?
- What should be done to facilitate positive internal and external customer service in the food production and services industry?

PROCESS QUESTIONS (Continued)

Management

- What skills do we need to manage internal and external customer relations in the food production and services industry?
- What criteria should be used to decide what to do when dealing with internal and external customer relations?
- What are the consequences (positive and negative) of dealing with internal and external customer service in the food production and service industry?

COMPREHENSIVE STANDARD

Food Science,
Dietetics, and
Nutrition

- 9.0 Integrate knowledge, skills, and practices required for careers in food science, dietetics, and nutrition.**

CONTENT STANDARDS

- 9.1 Analyze career paths within food science, dietetics, and nutrition industries.**
- 9.2 Apply risk management procedures to food safety, food testing, and sanitation.**
- 9.3 Evaluate nutrition principles, food plans, preparation techniques, and specialized dietary plans. (1)(2)**
- 9.4 Demonstrate basic concepts of nutritional therapy.**
- 9.5 Demonstrate use of current technology in food product development and marketing.**
- 9.6 Demonstrate food science, dietetics, and nutrition management principles and practices.**

References: Some materials were reviewed by professionals and abstracted from sets of standards from the following organizations:

- (1) Dietary Managers Association**
- (2) American Dietetics Association**
- (3) National Restaurant Association**
- (4) American Culinary Federation**
- (5) United States Food and Drug Administration, Center for Food Safety and Applied Nutrition**

FOOD SCIENCE, DIETETICS, AND NUTRITION

CONTENT STANDARD 9.1 Analyze career paths within food science, dietetics, and nutrition industries.

COMPETENCIES

- 9.1.1 Determine the roles and functions of individuals engaged in food science, dietetics, and nutrition careers.
- 9.1.2 Explore opportunities for employment and entrepreneurial endeavors.
- 9.1.3 Examine education and training requirements and opportunities for career paths in food science, dietetics, and nutrition.
- 9.1.4 Examine the impact of food science, dietetics, and nutrition occupations on local, state, national, and global economies.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)

Mathematics

- Interprets charts, tables, and graphs (MA 174)

Science

- Uses computers for information processing (SC 499)

FOOD SCIENCE, DIETETICS, AND NUTRITION

PROCESS QUESTIONS 9.1

Thinking

- What careers are involved in the food science, dietetics, and nutrition industry?
- What criteria can be used in career selection?
- Why is it important to research careers in the food science, dietetics, and nutrition industry? What values support a career decision?

Communication

- What communication skills are necessary for a career in this field?
- What questions need to be answered in order to make a wise career selection?
- In what way does communication with others assist us to critically analyze various career paths as a personal choice?

Leadership

- What leadership qualities are needed to be an entrepreneur in the food science, dietetics, and nutrition industry?
- How do our leadership skills affect career entrepreneur success or failure?
- What strategies would bring about change in the public's perception of food science, dietetics, and nutrition careers?

PROCESS QUESTIONS (Continued)

Management

- What resources and training are required for a career in the food science, dietetics, and nutrition industry?
- What personal factors affect career choices and goals in this industry?
- What might be the impact of long-term and short-term career goals on the food science, dietetics, and nutrition industry?

FOOD SCIENCE, DIETETICS, AND NUTRITION

CONTENT STANDARD 9.2 Apply risk management procedures to food safety, food testing, and sanitation.

COMPETENCIES

- 9.2.1 Determine factors that contribute to food borne illness. (5)
- 9.2.2 Employ food service management safety/sanitation programs. (3)
- 9.2.3 Use knowledge of systems for documenting, investigating, and reporting a food borne illness. (3)
- 9.2.4 Use the Hazard Analysis Critical Control Point (HACCP) during all food handling processes to minimize the risks of food borne illness. (4)
- 9.2.5 Practice good personal hygiene/health procedures. (4)
- 9.2.6 Demonstrate procedures for receiving and storage of raw and prepared foods. (4)
- 9.2.7 Classify current types of cleaning materials and sanitizers and their proper use. (4)
- 9.2.8 Use Occupational Safety and Health Administration's (OSHA) Right to Know Law and Material Safety Data Sheets (MSDS) and explain their requirements in handling hazardous materials. (4)
- 9.2.9 Demonstrate waste disposal and recycling methods. (4)

ACADEMIC PROFICIENCIES

Language Arts

- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)

Mathematics

- Uses inductive and deductive reasoning to solve problems (MA 130)
- Distinguishes proportions and congruence (MA 133)
- Identifies the application of statistical processes (MA 173)
- Measures time, temperature, volume, and weight (MA 182, MA 183, MA 184, MA 185)

Science

- Knows the environmental impact of materials (solid, liquid, gaseous) (SC 2)
- Understands the effect of chemicals on humans and plants (SC 3)
- Understands the interaction of organisms with their environment (SC 5)
- Applies and uses laboratory techniques safely (SC 041)
- Applies and uses maps, charts, tables and graphs to complete tasks (SC 042)
- Converts measurement units from metric (SC 052)
- Measures weight, temperature, time and the volumes of liquids and solids (SC 493, SC 495, SC 496, SC 497)
- Describes the immune system, the digestive system, selected diseases, and causes of weight gain and loss (SC 290, SC 291, SC 297, SC 309)
- Describes and explains heat conduction/convection, insulation requirements, radiant heating, temperature, and converts Fahrenheit to centigrade and vice versa (SC 273, SC 274, SC 280, SC 281, SC 282, SC 495)
- Describes and explains pulleys and levers as work saving devices (SC 447, SC 448)

FOOD SCIENCE, DIETETICS, AND NUTRITION

PROCESS QUESTIONS 9.2

Thinking

- What procedures are needed to ensure food safety and sanitation?
- What factors will affect our decisions in evaluating food safety and sanitation procedures?
- What choices should we advocate for individuals, families, and society when evaluating food safety, food testing, and sanitation procedures in order to meet health and safety procedures?

Communication

- How can we effectively communicate risk management procedures?
- How can we ensure that procedures are clearly understood by everyone involved in food safety, food testing, and sanitation?
- What are the consequences of not communicating food safety, food testing, and sanitation procedures to employees?

Leadership

- How can we act as leaders to set goals to follow food safety, food testing, and sanitation procedures?
- What actions should we take to guarantee food safety, food testing, and sanitation procedures are followed according to required guidelines?

PROCESS QUESTIONS (Continued)

- What should be done to facilitate food safety, food testing, and sanitation procedures in the workplace? What happens when food safety, food testing, and sanitation practices are effectively followed?

Management

- What steps do we need to take to ensure proper food safety and food testing and sanitation procedures are followed?
- What criteria are needed to develop a plan for following food safety, food testing, and sanitation procedures?
- What might be the consequences for the individual, family, and society (positive and negative) of how we manage food safety and sanitation procedures?

FOOD SCIENCE, DIETETICS, AND NUTRITION

CONTENT STANDARD 9.3 Evaluate nutrition principles, food plans, preparation techniques, and specialized dietary plans. (1) (2)

COMPETENCIES

- 9.3.1 Determine nutrient requirements across the life span addressing the diversity of people, culture, and religions. (1)(2)(4)
- 9.3.2 Appraise and interpret nutritional data. (1)
- 9.3.3 Assess principles to maximize nutrient retention in prepared foods. (2)(4)(5)
- 9.3.4 Assess the influence of socioeconomic and psychological factors on food and nutrition behavior. (2)
- 9.3.5 Monitor recipe/formula proportions and modifications for food production. (2)
- 9.3.6 Critique the selection of foods to promote a healthy lifestyle. (2)
- 9.3.7 Categorize foods into exchange groups and plan menus, applying the exchange system to meet various nutrient needs. (4)

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)

ACADEMIC PROFICIENCIES (Continued)

- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media (LA 5)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

Mathematics

- Mentally, manually, and by calculator, adds, subtracts, divides, multiplies whole and mixed numbers, fractions, decimals; calculates square root, percentages, and formulas (MA 1),(MA 2),(MA 3),(MA 4),(MA 5)
- Understands and applies basic and advanced methods of measurement (MA 6),(MA 7)
- Calculates and evaluates basic statistical routines (MA 019)
- Distinguishes proportions and congruence (MA 133)
- Estimates and rounds to determine estimated outcomes (MA 139)
- Formulates and verifies mathematical questions, determines the validity arguments, and establishes conclusions (MA 157, MA 158, MA 159)
- Identifies missing or irrelevant information when solving mathematical problems (MA 172)
- Identifies the application of statistical processes (MA 173)
- Interprets charts, tables, and graphs (MA 174)
- Interprets common symbols such as <, >, and = (MA 176)

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FOOD SCIENCE, DIETETICS, AND NUTRITION

PROCESS QUESTIONS 9.3

Thinking

- What contextual factors should be considered when evaluating nutrition information?
- What factors will affect our decisions about preparing and serving foods to meet nutritional needs of individuals and families across the life span?
- What might be the consequences for the well-being of the individual, families, and societies when foods are not prepared and served to meet nutritional needs?

Communication

- What do we do about understanding and evaluating nutritional information?
- How do we communicate nutritional information to others?
- How should we communicate to enhance the evaluation of nutrition information?

Leadership

- What skills do we need to relay to others to promote the evaluation of nutritional information?
- What guidelines promote evaluation of nutritional information?
- What actions can we create that meet our goals and standards for evaluating nutrition information?

PROCESS QUESTIONS (Continued)

Management

- What resources do we have to aid us in evaluating nutrition information?
- What resources are available that might help us prepare and serve food to meet nutritional needs of individuals and families?
- What actions can individuals and society take to evaluate nutrition information to promote optimal wellness?

FOOD SCIENCE, DIETETICS, AND NUTRITION

CONTENT STANDARD 9.3 Evaluate nutritional principles, food plans, preparation techniques, and specialized dietary plans. (1) (2)

ACADEMIC PROFICIENCIES (Continued)

Science

- Understands the effect of chemicals on humans and plants (SC 3)
- Applies and uses laboratory techniques safely (SC 041)
- Applies and uses maps, charts, tables and graphs to complete tasks (SC 042)
- Applies and uses scientific methods to solve problems (SC 044)
- Converts measurement units from metric to English and metric (SC 052)
- Describes and explains the relationship of heat and temperature (SC 282)
- Describes the immune system, the digestive system, selected diseases, and causes of weight gain and loss (SC 290, SC 291, SC 297, SC 309)
- Measures temperature using Fahrenheit and centigrade scales (SC 495)
- Measures time to complete a task (SC 496)
- Measures the volumes of liquids and solids (SC 497)
- Uses computers for information processing (SC 499)

FOOD SCIENCE, DIETETICS, AND NUTRITION

CONTENT STANDARD 9.4 Demonstrate basic concepts of nutritional therapy.

COMPETENCIES

- 9.4.1 Conduct nutritional screening. (1)(2)
- 9.4.2 Use nutritional information in care planning. (1)
- 9.4.3 Utilize a selective menu. (1)
- 9.4.4 Select appropriate special nourishment based on nutritional needs. (1)
- 9.4.5 Instruct individuals on nutrition for health maintenance and disease prevention.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in using writing and editing documents, using correct grammar, and punctuation (LA 3)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media (LA 5)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

ACADEMIC PROFICIENCIES (CONTINUED)

Mathematics

- Mentally, manually, and by calculator, adds, subtracts, divides, multiplies whole and mixed numbers, fractions, decimals; calculates square root, percentages, and formulas (MA 1),(MA 2),(MA 3),(MA 4),(MA 5)
- Understands and applies basic and advanced methods of measurement (MA 6),(MA 7)
- Calculates basic statistical routines (MA 019)
- Interprets common symbols (MA 176)
- Formulates and verifies mathematical questions, determines the validity arguments, and establishes conclusions (MA 157, MA 158, MA 159)
- Distinguishes proportions and congruence (MA 133)
- Estimates and rounds to determine estimated outcomes (MA 139)
- Identifies missing or irrelevant information when solving mathematical problems (MA 172)
- Identifies applications of statistical processes (MA 173)
- Interprets charts, tables, and graphs (MA 174)
- Understands sampling theory, probability theory, and error of measure (MA 257, MA 258, MA 259)

Science

- Applies and uses laboratory techniques safely (SC 041)
- Applies and uses maps, charts, tables and graphs to complete tasks (SC 042)
- Applies and uses scientific methods to solve problems (SC 044)
- Measures temperature using Fahrenheit and centigrade scales (SC 495)
- Measures time to complete a task (SC 496)
- Uses computers for information processing (SC 499)

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FOOD SCIENCE, DIETETICS, AND NUTRITION

PROCESS QUESTIONS 9.4

Thinking

- What are the basic concepts of nutritional therapy?
- What should be accomplished when implementing nutritional therapy?
- What beliefs, actions, or conditions prevent applying the basic concepts of nutritional therapy?

Communication

- What communication skills do we need to use to convey basic concepts of nutritional therapy?
- What questions do we ask in order to clarify the meaning of nutritional therapy?
- In what way does the use of communication contribute to the analysis of basic concepts of nutritional therapy?

Leadership

- What skills do we need to relate to others for health maintenance and disease prevention?
- What goals promote skills in nutrition counseling?
- What is the impact of contradictions and inaccuracies on the success of nutrition therapy?

PROCESS QUESTIONS (Continued)

Management

- What resources impact basic concepts of nutritional therapy?
- What should be our standards in managing nutrition counseling?
- What actions can individuals, families, and society take to promote optimal health and disease prevention?

FOOD SCIENCE, DIETETICS, AND NUTRITION

CONTENT STANDARD 9.5 Demonstrate use of current technology in food product development and marketing.

COMPETENCIES

- 9.5.1 Utilize various factors that affect food preferences in the marketing of food.
- 9.5.2 Utilize data in statistical analysis in making development and marketing decisions.
- 9.5.3 Prepare food for presentation and assessment.
- 9.5.4 Maintain test kitchen/laboratory and related equipment and supplies.
- 9.5.5 Implement procedures that affect quality product performance.
- 9.5.6 Conduct sensory evaluations of food products.
- 9.5.7 Conduct testing for safety of food products, utilizing available technology. (5)

ACADEMIC PROFICIENCIES

Language Arts

- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Follows written and oral directions to complete tasks (LA 035, LA 132, LA 278)
- Identifies a purpose and related strategy when speaking (LA 234)

ACADEMIC PROFICIENCIES (Continued)

- Informally discusses, requests, and supplies information to associates (LA 121, LA 167, LA 265)

Mathematics

- Understands and applies advanced concepts of data analysis and distributions (MA 10)
- Understands and applies advanced concepts of probability and statistics (MA 11)
- Mentally, manually, and by calculator, adds, subtracts, divides, multiplies whole and mixed numbers, fractions, decimals; calculates square root, percentages, and formulas (MA 1),(MA 2),(MA 3),(MA 4),(MA 5), (MA 264)

Science

- Analyzes and evaluates food additives, MSG, and vitamins (SC 004, SC 005, SC 006)
- Analyzes and evaluates environmental issues related to waste management (SC 012)
- Applies and uses laboratory techniques safely (SC 041)
- Applies and uses maps, charts, tables and graphs to complete tasks (SC 042)
- Converts measurement units from metric (SC 052)
- Explains the energy conversion process (SC 232)
- Describes and explains heat conduction/convection, insulation requirements, radiant heating, cooling, temperature, and converts Fahrenheit to centigrade and vice versa (SC 273, SC 274, SC 275, SC 277, SC 278, SC 279, SC 280, SC 281, SC 282, SC 495)
- Uses computers for information processing (SC 499)
- Measures weight, temperature, time and the volumes of liquids and solids (SC 493, SC 495, SC 496, SC 497)

FOOD SCIENCE, DIETETICS, AND NUTRITION

PROCESS QUESTIONS 9.5

Thinking

- What contextual factors might affect food preferences?
- How might these factors be interpreted to aid in food product development?
- What are the possible consequences (positive and negative) of food product development on the individual? families? community?

Communication

- What do we need to know in order to understand the relationship between current technology and product development?
- How can we utilize this data to enhance food product development?
- In what way does the use of communication contribute to successful food product development?

Leadership

- What skills do we need to successfully apply technology in food product development?
- What should be done to facilitate the implementation of procedures to ensure successful food product development?
- How do we know if we are achieving these goals?

PROCESS QUESTIONS (Continued)

Management

- What resources are needed to manage technology used in food product development?
- What criteria should be developed to examine the impact of current technology on food product development?
- What are the consequences of using technology in food product development? for individuals? families? employees? company?

FOOD SCIENCE, DIETETICS, AND NUTRITION

CONTENT STANDARD 9.6 Demonstrate food science, dietetics, and nutrition management principles and practices.

COMPETENCIES

- 9.6.1 Build menus to customer/client preferences. (1)
- 9.6.2 Implement food preparation, production, and testing systems. (1)(2)
- 9.6.3 Verify standards for food quality. (1)
- 9.6.4 Create standardized recipes. (1)
- 9.6.5 Manage amounts of food to meet needs of customers, clients. (1)
- 9.6.6 Examine new products. (1)
- 9.6.7 Implement procedures that provide cost effective products. (1)
- 9.6.8 Establish par levels for the purchase of supplies based on an organization's needs.
- 9.6.9 Utilize Food Code Points of time, temperature, date markings, cross contamination, hand washing, and personal hygiene as criteria for safe food preparation. (5)

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)

ACADEMIC PROFICIENCIES (Continued)

- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media (LA 5)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

Mathematics

- Mentally, manually, and by calculator, adds, subtracts, divides, multiplies whole and mixed numbers, fractions, decimals; calculates square root, percentages, and formulas (MA 1),(MA 2),(MA 3),(MA 4),(MA 5)
- Understands and applies basic and advanced methods of measurement (MA 6),(MA 7)
- Calculates and evaluates algebraic expressions; and solves problems and generates conclusions using deductive reasoning (MA 001, MA 229)

Science

- Understands the effect of chemicals on humans and plants (SC 3)
- Analyzes and evaluates environmental issues related to waste management (SC 012)
- Applies and uses laboratory techniques safely (SC 041)
- Applies and uses maps, charts, tables and graphs to complete tasks (SC 042)
- Applies and uses scientific methods to solve problems (SC 044)
- Converts measurement units from metric (SC 052)
- Describes and explains heat conduction/convection, insulation requirements, radiant heating, and temperature (SC 273, SC 274, SC 280, SC 281, SC 282)
- Measures weight, temperature, time and the volumes of liquids and solids (SC 493, SC 495, SC 496, SC 497)

FOOD SCIENCE, DIETETICS, AND NUTRITION

PROCESS QUESTIONS 9.6

Thinking

- What are food science, dietetics, and nutrition management functions?
- What are the goals and standards of food science, dietetics, and nutrition management?
- Whose interests are served when we meet the goals of food science, dietetics, and nutrition management?

Communication

- How can we communicate effectively the functions of food science, dietetics, and nutrition management?
- What questions do we ask to clarify customer/client preferences and needs in relation to food science, dietetics, and nutrition management?
- What are the consequences (positive and negative) of communicating the needs of individuals, families, and society in relation to food science, dietetics, and nutrition management?

Leadership

- What skills do we need as leaders to implement food science, dietetics, and nutrition management functions?
- How do we handle conflict in implementing food science, dietetics, and nutrition management functions?

PROCESS QUESTIONS (Continued)

- What should be done to facilitate the implementation of food science, dietetics, and nutrition management functions? How can we ensure that the group shares the same goals?

Management

- What resources are needed to implement food science, dietetics, and nutrition management functions?
- What criteria should be used to evaluate food science, dietetics, and nutrition management functions? Why is this important to evaluate?
- What are the consequences (positive and negative) of implementing food science, dietetics, and nutrition management functions? on employees? company? individual customers/clients? others?

COMPREHENSIVE STANDARD

Hospitality,
Tourism, and
Recreation

10.0 Integrate knowledge, skills, and practices required for careers in hospitality, tourism, and recreation.

CONTENT STANDARDS

- 10.1 Analyze career paths within the hospitality, tourism, and recreation industries.**
- 10.2 Demonstrate procedures applied to safety, security, and environmental issues.**
- 10.3 Apply concepts of service to meet customer expectations.**
- 10.4 Demonstrate practices and skills involved in lodging occupations.**
- 10.5 Demonstrate practices and skills for travel related services.**
- 10.6 Demonstrate management of recreation, leisure, and other programs and events.**

(1) Educational Institute of the American Hotel and Motel Association

HOSPITALITY, TOURISM, AND RECREATION

CONTENT STANDARD 10.1 Analyze career paths within the hospitality, tourism, and recreation industries.

COMPETENCIES

- 10.1.1 Determine the roles and functions of individuals engaged in hospitality, tourism, and recreation careers.
- 10.1.2 Explore opportunities for employment and entrepreneurial endeavors.
- 10.1.3 Examine education and training requirements and opportunities for career paths in hospitality, tourism, and recreation.
- 10.1.4 Examine the impact of hospitality, tourism, and recreation occupations on local, state, national, and global economies.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)

Mathematics

- Interprets charts, tables, and graphs (MA 174)

Science

- Uses computers for information processing (SC 499)

HOSPITALITY, TOURISM, AND RECREATION

PROCESS QUESTIONS 10.1

Thinking

- What information do we need to examine career paths within the hospitality, tourism, and recreation industry?
- What factors will affect our career decisions?
- What are the consequences of selecting various career paths in the hospitality industry? environmental? social? ethical?

Communication

- What communication skills do we need to examine career paths?
- What questions do we ask in order to clarify which career path within the hospitality industry would work for us?
- What criteria would we use to evaluate careers in the hospitality industry?

Leadership

- What skills do we need to relate to others who work in the hospitality career paths?
- What leadership strategies would be appropriate for a career path in the hospitality industry?
- How could we use reflective questioning to match leadership strategies to hospitality career paths?

PROCESS QUESTIONS (Continued)

Management

- What resources do we have to reach our career path goals within the hospitality industry?
- What steps need to be taken to achieve career goals within the hospitality industry?
- Whose interests are being served in selecting career paths in the hospitality industry?

HOSPITALITY, TOURISM, AND RECREATION

CONTENT STANDARD 10.2 Demonstrate procedures applied to safety, security, and environmental issues.

COMPETENCIES

- 10.2.1 Examine the importance of safety, security, and environmental issues related to the hospitality, tourism, and recreation industries. (1)
- 10.2.2 Demonstrate ability to ensure customer safety. (1)
- 10.2.3 Manage evacuation plans and emergency procedures. (1)
- 10.2.4 Examine utilization of resources and ways to conserve them. (1)
- 10.2.5 Design a system for documenting and investigating reports related to safety, security, and environmental issues. (1)

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

ACADEMIC PROFICIENCIES (Continued)

Mathematics

- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals (MA 1), (MA 2)
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, and calculate square root (MA 3)
- Mentally adds, subtracts, divides, and multiplies whole numbers (MA 4)
- Uses a calculator to add, subtract, divide, and multiply, calculate percentages, ratios (MA 5)
- Understands and applies basic methods of measurement (MA 6)
- Understands and applies advanced methods of measurement (MA 7)
- Interprets charts, tables, and graphs (MA 174)
- Solves problems and generates conclusions using deductive reasoning (MA 229)

Science

- Uses common laboratory equipment and procedures (SC 1)
- Knows the environmental impact of materials (solid, liquid, gaseous) (SC 2)
- Understands the effect of chemicals on humans and plants (SC 3)

HOSPITALITY, TOURISM, AND RECREATION

PROCESS QUESTIONS 10.2

Thinking

- What are the present standards for meeting safety, security, and environmental issues within the hospitality/tourism industry?
- What criteria should we use to decide what to do about safety, security, and environmental issues in the hospitality/tourism industry?
- Whose interests are served? What is morally and ethically acceptable?

Communication

- What do we do regarding understanding the procedures about safety, security, and environmental issues?
- What questions do we ask in order to clarify meaning of safety, security, and environmental issues in the hospitality/tourism industry?
- How do we eliminate or minimize the roadblocks to the communication process as it applies to safety, security, and environmental issues?

Leadership

- How do we act as leaders to promote procedures applied to safety, security, and environmental issues?
- How do we work with others to set goals regarding procedures applied to safety, security, and environmental issues?
- What effect might the consequences (positive and negative) of our actions have on safety, security, and environmental issues?

PROCESS QUESTIONS (Continued)

Management

- What steps do we need to take to analyze procedures as applied to safety, security, and environmental issues?
- What is the value of this plan for use and others? Why?
- When considering safety, security, and environmental issues, what is the best action to take economically? ethically?

HOSPITALITY, TOURISM, AND RECREATION

CONTENT STANDARD 10.3 Apply concepts of service to meet customer expectations.

COMPETENCIES

- 10.3.1 Practice service methods which exceed the expectations of customers. (1)
- 10.3.2 Determine the relationship between employees' attitude and actions and customer satisfaction. (1)
- 10.3.3 Employ strategies for resolving complaints. (1)
- 10.3.4 Measure the impact customer relations has on success of the hospitality, tourism, and recreation industry. (1)
- 10.3.5 Measure the impact customer relations has on the needs of special populations. (1)

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media (LA 5)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

Mathematics

- Interprets charts, tables, and graphs (MA 174)
- Solves problems and generates conclusions using deductive reasoning (MA 229)

HOSPITALITY, TOURISM, AND RECREATION

PROCESS QUESTIONS 10.3

Thinking

- What are present standards in service work roles as they apply to customer expectations?
- What are the end results that should be accomplished? What should be our standards? What viewpoints do other have? What viewpoints do those affected have?
- What are the consequences (positive and negative) for individuals and industries regarding customer expectations and services?

Communication

- What communication skills are needed to demonstrate service methods in hospitality, tourism, and recreation?
- What insights do we have when we critique the impact customer relations has on hospitality, tourism, and recreation?
- What are the consequences of applying strategies both positive and negative for resolving complaints?

Leadership

- What are our goals for evaluating customer satisfaction?
- What goals do other hospitality, tourism, and recreation facilities have? How do company goals affect employees?
- What should be done to facilitate consensus building for employee, company, and customer goals?

PROCESS QUESTIONS (Continued)

Management

- How can we act efficiently concerning customer relations with special populations?
- What is the value of a special population customer service plan?
- What are the consequences of using our resources to service special populations?

HOSPITALITY, TOURISM, AND RECREATION

CONTENT STANDARD 10.4 Demonstrate practices and skills involved in lodging occupations.

COMPETENCIES

- 10.4.1 Demonstrate front desk skills. (1)
- 10.4.2 Perform cash handling, accounting, and financial transactions. (1)
- 10.4.3 Manage convention, meeting, and banquet support functions. (1)
- 10.4.4 Apply basic skills in food and catering services. (1)
- 10.4.5 Manage use, care, maintenance, and storage of equipment, tools, and supplies. (1)
- 10.4.6 Apply facility services skills. (1)
- 10.4.7 Apply time and work management to facility service tasks. (1)
- 10.4.8 Perform appropriate work roles within the sales and marketing division. (1)

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)

ACADEMIC PROFICIENCIES (Continued)

- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media (LA 5)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

Mathematics

- Mentally, manually, and by calculator, adds, subtracts, divides, multiplies whole and mixed numbers, fractions, decimals; calculates square root, percentages, and formulas (MA 1),(MA 2),(MA 3),(MA 4),(MA 5)
- Understands and applies basic and advanced methods of measurement (MA 6), (MA 7)

Science

- Uses common laboratory equipment and procedures (SC 1)
- Knows the environmental impact of materials (solid, liquid, gaseous) (SC 2)
- Understands the effect of chemicals on humans and plants (SC 3)
- Describes and explains chemical reactions including inhibitors (SC 114, SC 121)
- Describes and explains series and parallel circuits, generators, and transformers (SC 186, SC 194, SC 197, SC 517)
- Describes and explains heat conduction/convection, insulation and cooling requirements, radiant heating, and temperature (SC 273, SC 274, SC 275, SC 280, SC 281, SC 282)
- Identifies organisms such as bacteria and fungi (SC 480, SC 481)
- Identifies acids and bases (SC 449)
- Describes and explains chemical reactions related to contamination (SC 512)

HOSPITALITY, TOURISM, AND RECREATION

PROCESS QUESTIONS 10.4

Thinking

- What procedures exist or need to be invented to perform tasks involved in lodging operations?
- What aesthetic, economic, environmental, standards are needed to perform tasks involved in lodging occupations?
- What actions can we create that meet our goals and standards for performing tasks involved in lodging occupations?

Communication

- What communication skills do we need to perform tasks involved in lodging occupations?
- What do we do about communicating feedback to encourage others when performing tasks involved in lodging occupations?
- How do we eliminate or minimize the roadblocks to communication when performing tasks involved in lodging occupations?

Leadership

- How do we act as leaders to achieve group goals when performing tasks involved in lodging occupations?
- How is conflict handled in groups which perform tasks involved in lodging occupations?
- What should be done to facilitate consensus building when managing conflict while performing tasks involved in lodging occupations?

PROCESS QUESTIONS (Continued)

Management

- What goals do we have when performing tasks involved in lodging occupations?
- What goals do other people have about performance tasks involved in lodging occupations?
- How do our goals to perform tasks involved in lodging occupations impact the goals of others? What if everyone acted this way?

HOSPITALITY, TOURISM, AND RECREATION

CONTENT STANDARD 10.5 Demonstrate practices and skills for travel related services.

COMPETENCIES

- 10.5.1 Examine geography, climate, sites, and time zones of various regions and countries.
- 10.5.2 Examine customs of various regions and countries.
- 10.5.3 Inspect food, beverage, and etiquette for various regions and countries.
- 10.5.4 Assemble information needed for domestic and international travel. (1)
- 10.5.5 Produce travel documents and itineraries.
- 10.5.6 Check travel arrangements using computerized systems.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media (LA 5)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

Mathematics

- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals (MA 1), (MA 2)
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, and calculate square root (MA 3)
- Mentally adds, subtracts, divides, and multiplies whole numbers (MA 4)
- Uses a calculator to add, subtract, divide, and multiply, calculate percentages, ratios (MA 5)
- Uses a calculator or computer to manipulate formulas (MA 264)

HOSPITALITY, TOURISM, AND RECREATION

PROCESS QUESTIONS 10.5

Thinking

- What contextual factors should be considered when analyzing travel related services?
- What factors will affect us when involved in travel related services (environment, social, cultural, political)?
- Is the information we are using to analyze travel-related services relevant? reliable? reasonably adequate?

Communication

- How can we communicate effectively when we analyze travel-related services (i.e., coordinate travel documents and itineraries)?
- What insights do we have into individual differences when involved in travel related services (i.e., examine customs and traditions of country, region, etc.)?
- How can we eliminate roadblocks to communication when analyzing travel related services?

Leadership

- What leadership techniques do we need to know when analyzing travel-related services?
- How do we know if we are listening for understanding when working in travel related services?
- What point of view is most justified when analyzing travel related services?

PROCESS QUESTIONS (Continued)

Management

- How can we act efficiently when involved in travel related services?
- What criteria should be used to decide what practices and skills are used?
- Considering our criteria, what other ways could we work efficiently in travel related services?

HOSPITALITY, TOURISM, AND RECREATION

CONTENT STANDARD 10.6 Demonstrate management of recreation, leisure, and other programs and events.

COMPETENCIES

- 10.6.1 Coordinate client inquiries and requests.
- 10.6.2 Design themes, time lines, budgets, agendas, and itineraries.
- 10.6.3 Organize locations, facilities, suppliers, and vendors for specific services.
- 10.6.4 Prepare for distribution of event materials.
- 10.6.5 Demonstrate skills related to promoting and publicizing events.
- 10.6.6 Manage programs and events for specific age groups or populations.
- 10.6.7 Promote wellness through recreation and leisure programs and events.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)

ACADEMIC PROFICIENCIES (Continued)

- Demonstrates competence in making oral formal and informal presentations, including selecting and using media (LA 5)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

Mathematics

- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals (MA 1), (MA 2)
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, and calculate square root (MA 3)
- Mentally adds, subtracts, divides, and multiplies whole numbers (MA 4)
- Interprets charts, tables, and graphs (MA 174)
- Solves problems and generates conclusions using deductive reasoning (MA 229)

Science

- Knows the environmental impact of materials (solid, liquid, gaseous) (SC 2)
- Understands the effect of chemicals on humans and plants (SC 3)
- Describes and explains series and parallel circuits, generators, transformers, and measures voltage (SC 186, SC 194, SC 197, SC 205, SC 517)
- Describes and explains human development and the aging process, digestive system, diseases, blood plasma, pressure and the circulatory system, metabolism, skin and muscles (SC 284, SC 286, SC 287, SC 288, SC 290, SC 291, SC 298, SC 299, SC 300, SC 304, SC 307, SC 309)
- Describes fluid and hydraulic systems (SC 503)

HOSPITALITY, TOURISM, AND RECREATION

PROCESS QUESTIONS 10.6

Thinking

- What contextual factors should be considered as we analyze recreation, leisure, and play activities as applied to the hospitality industry?
- What factors will affect our decisions (environmental, social, cultural, political) as we analyze recreation, leisure, and play activities as applied to the hospitality industry?
- What are the best management practices to implement regarding recreation, leisure, and play activities as applied to the hospitality industry? ethics? economics?

Communication

- How can we communicate effectively as we analyze recreation, leisure, and play activities as applied to the hospitality industry?
- What insights do we have into individual differences as we analyze recreation, leisure, and play activities as applied to the hospitality industry?
- How do we eliminate or minimize the roadblocks to communication as we analyze recreation, leisure, and play activities as applied to the hospitality industry?

PROCESS QUESTIONS (Continued)

Leadership

- What skills do we need to relate to others as we analyze recreation, leisure, and play activities as applied to the hospitality industry?
- How is conflict handled in groups as we analyze recreation, leisure, and play activities as applied to the hospitality industry?
- What effect would the consequences (positive and negative) have as we analyze recreation, leisure, and play activities as applied to the hospitality industry?

Management

- What are the steps in the planning process (who, what, where, when, how) as we analyze recreation, leisure, and play activities as applied to the hospitality industry?
- What is the value of this plan for others and us as we analyze recreation, leisure, and play activities as applied to the hospitality industry?
- Considering our criteria, what other ways could we manage recreation, leisure, and play activities in the future?

COMPREHENSIVE STANDARD

Housing, Interiors,
and Furnishings

11.0 Integrate knowledge, skills, and practices required for careers in housing, interiors, and furnishings.

CONTENT STANDARDS

- 11.1 Analyze career paths within the housing, interiors, and furnishings industry.**
- 11.2 Evaluate housing decisions in relation to available resources and options.**
- 11.3 Evaluate the use of housing and interior furnishings and products in meeting specific design needs.**
- 11.4 Demonstrate computer-aided drafting design, blueprint reading, and space planning skills required for the housing, interiors, and furnishings industry.**
- 11.5 Analyze influences on architectural and furniture design and development.**
- 11.6 Evaluate client's needs, goals, and resources in creating design plans for housing, interiors, and furnishings.**
- 11.7 Demonstrate design ideas through visual presentation.**
- 11.8 Demonstrate general procedures for business profitability and career success.**

HOUSING, INTERIORS, AND FURNISHINGS

CONTENT STANDARD 11.1 Analyze career paths within the housing, interiors, and furnishings industry.

COMPETENCIES

- 11.1.1 Determine the roles and functions of individuals engaged in housing, interiors, and furnishings careers.
- 11.1.2 Explore opportunities for employment and entrepreneurial endeavors.
- 11.1.3 Examine education and training requirements and opportunities for career paths in housing, interiors, and furnishings.
- 11.1.4 Examine the impact of housing, interiors, and furnishings occupations on local, state, national, and global economies.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)

Mathematics

- Interprets charts, tables, and graphs (MA 174)

Science

- Uses computers for information processing (SC 499)

HOUSING, INTERIORS, AND FURNISHINGS

PROCESS QUESTIONS 11.1

Thinking

- What careers are involved in the interiors and furnishings industry? What are the roles and functions of individuals engaged in these careers?
- What criteria can be used in career selection? What career opportunities are available in this field?
- Why is it important to research careers in the interiors and furnishings industry?

Communication

- What communication skills are necessary for a career in this field?
- What questions need to be answered in order to make a wise career selection?
- What are the consequences of selecting a career in the interiors and furnishing industry?

Leadership

- What leadership qualities are needed in the interiors and furnishings industry?
- How do our leadership skills affect career success or failure?
- What strategies would bring about desirable change in the public's perception of interiors and furnishings employees?

PROCESS QUESTIONS (Continued)

Management

- What resources and training are required for a career in the interiors and furnishings industry?
- What personal factors affect our career choices and goals in this industry?
- How might housing, interiors, and furnishings occupations impact local, state, national, and global economies?

HOUSING, INTERIORS, AND FURNISHINGS

CONTENT STANDARD 11.2 Evaluate housing decisions in relation to available resources and options.

COMPETENCIES	
11.2.1	Determine the principles and elements of design.
11.2.2	Determine the psychological impact that the principles and elements of design have on the individual.
11.2.3	Determine the effects that the principles and elements of design have on aesthetics and function.

ACADEMIC PROFICIENCIES
Language Arts <ul style="list-style-type: none">• Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)• Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)• Demonstrates competence in speaking to provide, distribute, or find information (LA 4)• Demonstrates competence in making oral formal and informal presentations, including selecting and using media (LA 5)

HOUSING, INTERIORS, AND FURNISHINGS

PROCESS QUESTIONS 11.2

Thinking

- What are the qualities of an aesthetic and functional environment?
- What factors should be considered when creating environments?
- What are the consequences of having an aesthetic and functional environment? of not having an aesthetic and functional environment?

Communication

- What do we need to know about understanding personal choices?
- What insights do we have into individual differences concerning the application of principles and elements of design?
- In what way does the use of communication contribute to creating pleasing environments?

Leadership

- What are our goals for creating environments that are aesthetic and functional?
- What criteria should be used in helping others to utilize the principles and elements of design?
- What should be done to inspire a clear vision of the importance of considering aesthetics and function in creating environments?

PROCESS QUESTIONS (Continued)

Management

- How can we plan an environment that meets the principles and elements of design?
- What criteria should be used to create the desired environment?
- How do our criteria reflect that the best choice was made regarding housing resources and options?

HOUSING, INTERIORS, AND FURNISHINGS

CONTENT STANDARD 11.3 Evaluate the use of housing and interior furnishings and products in meeting specific design needs.

COMPETENCIES

- 11.3.1 Research product information, including but not limited to floor coverings, wall coverings, textiles, window treatments, furniture, lighting fixtures, kitchen and bath fixtures, and equipment, accessories, and building materials.
- 11.3.2 Select manufacturers, products, and materials, considering care, maintenance, safety, and environmental issues.
- 11.3.3 Review measuring, estimating, ordering, purchasing, and pricing skills.
- 11.3.4 Appraise various interior furnishings, appliances, and equipment which provide cost and quality choices for clients.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)

ACADEMIC PROFICIENCIES (Continued)

- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media (LA 5)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

Mathematics

- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals (MA 1), (MA 2)
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, and calculates square root (MA 3)
- Mentally adds, subtracts, divides, and multiplies whole numbers (MA 4)
- Precisely calculates areas, circumferences, perimeters, and surface areas of geometric figures (MA 005, MA 006, MA 007, MA 008, MA 014)
- Estimates and rounds to determine estimated outcomes (MA 139)
- Measures distance, using standard measurement tools (MA 181)
- Uses calculator to add, subtract, multiply, divide and to calculate formulas (MA 261, MA 262, MA 264, MA 266, MA 268)

HOUSING, INTERIORS, AND FURNISHINGS

PROCESS QUESTIONS 11.3

Thinking

- What factors should be considered when making housing and interior furnishings and products decisions?
- What economic factors will affect our decisions? environmental? social? cultural?
- What alternatives might we create that will have varying effects on design choices?

Communication

- What do we need to know about understanding customer needs?
- What questions should we ask in order to clarify customer needs?
- How do we eliminate the roadblocks to effective communication with customers?

Leadership

- What skills do we need to relay to others when meeting specific design needs?
- What are the guidelines for meeting the goals of customer needs?
- What effect would the consequences (positive and negative) of our actions have on others?

PROCESS QUESTIONS (Continued)

Management

- How can we perform services to meet specific design needs?
- What criteria should be used to meet design needs?
- Considering our criteria, was this the best action to take? Why or why not?

HOUSING, INTERIORS, AND FURNISHINGS

CONTENT STANDARD 11.4 Demonstrate computer-aided drafting design, blueprint reading, and space planning skills required for the housing, interiors, and furnishings industry.

COMPETENCIES

- 11.4.1 Read information provided on blueprints.
- 11.4.2 Examine floor plans for efficiency and safety in areas including but not limited to zones, traffic patterns, storage, electrical, and mechanical systems.
- 11.4.3 Draw an interior space to scale, using correct architecture symbols and drafting skills.
- 11.4.4 Arrange furniture placement with reference to principles of design, traffic flow, activity, and existing architectural features.
- 11.4.5 Utilize applicable building codes, universal guidelines, and regulations in space planning.
- 11.4.6 Create floor plans, using computer design software.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)

ACADEMIC PROFICIENCIES (Continued)

- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media (LA 5)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

Mathematics

- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals (MA 1), (MA 2)
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, and calculate square root, calculate percentages, ratios, and formulas (MA 1), (MA 5), (MA 264)
- Mentally adds, subtracts, divides, and multiplies whole numbers (MA 4)
- Precisely calculates areas, circumferences, perimeters, and surface areas of geometric figures (MA 005, MA 006, MA 007, MA 008, MA 014)
- Distinguishes proportions and congruence (MA 133)
- Identifies the application of statistical processes (MA 173)
- Estimates and rounds to determine estimated outcomes (MA 139)
- Measures distance using standard measurement tools (MA 181)
- Uses calculator to add, subtract, multiply, divide and to calculate formulas (MA 261, MA 262, MA 264, MA 266, MA 268)
- Constructs angles, geometric figures, and lines (MA 094, MA 100, MA 112)
- Distinguishes characteristics of angles, circles, and arcs (MA 128)
- Identifies parallel/perpendicular, vertical/horizontal lines, and line rays/segments (MA 168, MA 169, MA 170)
- Constructs charts, tables, and graphs (MA 097)
- Interprets common symbols such as <, >, and = (MA 176)

HOUSING, INTERIORS, AND FURNISHINGS

PROCESS QUESTIONS 11.4

Thinking

- What factors should be considered when using CAD drafting, blueprint reading and space planning?
- What end results are desirable in CAD drafting, blueprint reading, and space planning?
- What are the consequences of effective CAD drafting, blueprint reading and effective space planning?

Communication

- What do we need to know about the space needs of customers?
- What insights do we have into individual differences concerning space needs of customers?
- In what way does the use of communication contribute to creating a well-planned space?

Leadership

- What are our goals for using CAD drafting, blueprint reading, and space planning?
- What guidelines should be used to assess proficiency of CAD drafting, blueprint reading, and space planning skills?
- What should be done to inspire a clear vision of the importance of acquiring technological skills in space planning?

PROCESS QUESTIONS (Continued)

Management

- How can we demonstrate skill proficiency?
- What is the value of using CAD drafting, blueprint reading and space planning?
- What are the consequences of using these resources?

HOUSING, INTERIORS, AND FURNISHINGS

CONTENT STANDARD 11.5 Analyze influences on architectural and furniture design and development.

COMPETENCIES

- 11.5.1 Explore features of furnishings that are characteristic of various historical periods.
- 11.5.2 Consider how prosperity, mass production, and technology are related to the various periods.
- 11.5.3 Examine the development of architectural styles throughout history.
- 11.5.4 Compare historical architectural details to current housing and interior design trends.
- 11.5.5 Consider future trends in architectural and furniture design and development.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)

HOUSING, INTERIORS, AND FURNISHINGS

PROCESS QUESTIONS 11.5

Thinking

- How has the past influenced architectural and furniture design?
- How can we assess the effect of influences on architectural and furniture design and development?
- What might be the consequences of understanding the impact of the past on architectural and furniture design and development?

Communication

- What do we need to know about the impact of history on design and development?
- What questions do we need to ask to clarify the influence of history?
- In what way does the use of communication contribute to an understanding of current design and development?

Leadership

- What are our goals in planning the use of architectural and furniture design?
- What guidelines should be used to assess understanding of the impact of history on architectural and furniture design?
- What should be done to inspire a clear vision of the impact of history on design and development?

PROCESS QUESTIONS (Continued)

Management

- How can we make future choices by reflecting on our past concerning design and development?
- What is the value of using history to understand architectural and furniture design?
- What are the consequences of considering the past in making architectural and furniture design choices?

HOUSING, INTERIORS, AND FURNISHINGS

CONTENT STANDARD 11.6 Evaluate client's needs, goals, and resources in creating design plans for housing, interiors, and furnishings.

COMPETENCIES

- 11.6.1 Assess human needs, safety, space, and technology as they relate to housing and interior design goals.
- 11.6.2 Assess community, family, and financial resources needed to achieve clients' housing and interior goals.
- 11.6.3 Assess a variety of available resources for housing and interior design.
- 11.6.4 Critique design plans that address client's needs, goals, and resources.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)

HOUSING, INTERIORS, AND FURNISHINGS

PROCESS QUESTIONS 11.6

Thinking

- What information is needed to create a design plan?
- What should be the standards for designing a plan for meeting a client's needs, goals, and resources?
- What alternatives might we create that will have positive effects for the client?

Communication

- What communication skills are needed when working with a client to create a design plan?
- What questions do we need to ask in order to clarify a client's needs, goals, and resources?
- What are the consequences of creating a design plan for a client without input from the client?

Leadership

- What skills do we need to create a design plan?
- How do we know if we are listening to the client's needs when creating their design plan?
- What should be done to build a consensus between the client and designer?

PROCESS QUESTIONS (Continued)

Management

- What steps do we need to take to create a design plan that meets the needs of the client? What resources are available?
- What resources do others have that might help us create the design plan?
- How do our goals impact on the goals of the client?

HOUSING, INTERIORS, AND FURNISHINGS

CONTENT STANDARD 11.7 Demonstrate design ideas through visual presentation.

COMPETENCIES

- 11.7.1 Select appropriate studio tools.
- 11.7.2 Prepare renderings, elevations, and sketches, using appropriate media.
- 11.7.3 Prepare visual presentations, including legends, keys, and schedules.
- 11.7.4 Utilize a variety of presentation media such as photography, video, computer, and software for client presentations.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media (LA 5)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

Mathematics

- Constructs charts, tables, and graphs (MA 097)
- Distinguishes proportions and congruence (MA 133)

HOUSING, INTERIORS, AND FURNISHINGS

PROCESS QUESTIONS 11.7

Thinking

- What factors should be considered when selecting studio tools?
- What should be our standard when selecting design ideas for a visual presentation?
- Whose interests are served when choosing appropriate presentation media? What criteria should be considered in selecting appropriate media?

Communication

- What do we do about expressing feelings through visual presentation?
- What questions do we ask in order to clarify the meaning of ideas through visual presentation? How do we know if we are listening for understanding when preparing visual presentations?
- What are the consequences of understanding communication skills when developing a visual presentation?

Leadership

- What skills do we need to design an effective visual presentation?
- How do we ensure that the design goals are communicated through the presentation?
- What are the consequences (positive and negative) of selecting appropriate media when developing a visual presentation?

PROCESS QUESTIONS (Continued)

Management

- What happens when inappropriate media is selected?
- What resources do we have to prepare this presentation? What resources do others have that might help us select appropriate media for a visual presentation?
- How can the criteria developed for the visual presentation determine the end product being developed? Considering criteria, what other ways could we do this in the future?

HOUSING, INTERIORS, AND FURNISHINGS

CONTENT STANDARD 11.8 Demonstrate general procedures for business profitability and career success.

COMPETENCIES

- 11.8.1 Examine legislation, regulations, and public policy affecting the housing, interiors, and furnishings industry.
- 11.8.2 Examine personal and employer responsibilities and liabilities regarding industry related safety, security, and environmental factors.
- 11.8.3 Examine security and inventory control strategies, laws, and worksite policies, and how they affect loss prevention and store profit.
- 11.8.4 Demonstrate procedures for reporting and handling accidents, safety, and security incidents.
- 11.8.5 Apply procedures for maintaining inventory control and loss prevention, including cash and credit transactions.
- 11.8.6 Examine operational costs such as mark ups, mark downs, cash flow, and other factors affecting profit.
- 11.8.7 Demonstrate knowledge of the arts, of various resources, and of cultural impact upon design industries.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media (LA 5)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

Mathematics

- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals (MA 1), (MA 2)
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, and calculate square root (MA 3)
- Mentally adds, subtracts, divides, and multiplies whole numbers (MA 4)
- Uses a calculator to add, subtract, divide, and multiply, calculate percentages, ratios (MA 5)

Science

- Analyzes and evaluates environmental issues (SC 007)

HOUSING, INTERIORS, AND FURNISHINGS

PROCESS QUESTIONS 11.8

Thinking

- What skills are needed for business profitability and career success?
- What factors will affect our decisions in preparing for employment in the housing industry?
- What might be the consequences of adequately preparing for employment?

Communication

- What do we need to know about communication skills?
- What questions do we need to ask to determine employability readiness?
- In what way does the use of communication contribute to business profitability and career success?

Leadership

- What employability skills do we need to acquire?
- What criteria should we use to determine business and career readiness?
- What values support our decisions related to profitability and career success?

PROCESS QUESTIONS (Continued)

Management

- What are our goals? What information do we need? What skills are needed for business profitability and success?
- What criteria should be used to determine skill levels required to meet standard practices?
- What are the positive and negative consequences associated with business profitability and career success?

COMPREHENSIVE STANDARD

Human
Development

12.0 Analyze factors that impact human growth and development.

CONTENT STANDARDS

12.1 Analyze principles of human growth and development across the life span.

12.2 Analyze conditions that influence human growth and development.

12.3 Analyze strategies that promote growth and development across the life span.

HUMAN DEVELOPMENT

CONTENT STANDARD 12.1 Analyze principles of human growth and development across the life span.

COMPETENCIES

- 12.1.1 Examine physical, emotional, social, and intellectual development.
- 12.1.2 Examine interrelationships among physical, emotional, social, and intellectual aspects of human growth and development.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (**LA 1**)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (**LA 2**)

Science

- Describes human development processes (**SC 289**)

PROCESS QUESTIONS 12.1

Thinking

- What are the areas and characteristics of human development?
- How has human growth and development been influenced by historical perspectives and theory (i.e. Maslow, Freud, Erikson, and others)?
- What contradictions exist between what we know about human growth and development and practices and conditions currently existing in society? prenatal care? child care? balancing work and family? geriatric care?

Communication

- In what way is communication influenced by personality? temperament? experience? situation?
- What can we assume regarding communication based on human growth and development characteristics?
- How should we communicate to enhance family environment? social environment? work environment? political and economic environment?

PROCESS QUESTIONS (Continued)

Leadership

- What skills do we need to work as a group to promote human growth and development? visionary? relating to group members? leadership strategies?
- What goals promote human growth and development?
- What actions can we create that would promote human growth and development for individuals? families? society?

Management

- What resources impact human growth and development?
- What should be our standards in managing resources for optimal human growth and development?
- What actions can individuals, families, and society take to promote optimal human growth and development?

HUMAN DEVELOPMENT

CONTENT STANDARD 12.2 Analyze conditions that influence human growth and development.

COMPETENCIES

- 12.2.1 Investigate the impact of heredity and environment on human growth and development.
- 12.2.2 Determine the impact of social, economic, and technological forces on individual growth and development.
- 12.2.3 Examine the effects of gender, ethnicity, and culture on individual development.
- 12.2.4 Examine the effects of life events on individuals' physical and emotional development.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)

Science

- Describes and explains the role of genetics (SC 261, SC 268)

PROCESS QUESTIONS 12.2

Thinking

- What problems or difficulties exist that constrain human growth and development? What are the causes of the problems? When do they occur?
- What factors will affect human growth and development across the life span? cultural? social? political? environmental? religious? ethnic? genetic? gender? technology?
- What existing beliefs and actions regarding personal and social forces limit human growth and development throughout the life span?

Communication

- What skills do we need to work together to achieve group goals regarding personal and social human development?
- What goals do group members have regarding personal and social influences that affect human development?
- What should be done to facilitate collaboration in achieving goals concerning personal and social development?

PROCESS QUESTIONS (Continued)

Leadership

- How do we act as leaders in promoting the understanding of personal and social influences on human development?
- What do our actions communicate to others in regard to individual beliefs about personal and social influences on human development?
- What should be done to solve problems regarding personal and social forces that affect human growth and development?

Management

- What resources would be influenced as a result of changing personal and social conditions? new family member? loss of family member? mobility of family member?
- What resources are available to manage personal and social influences on human development?
- What are the consequences of managing or not managing personal and social influences on human development?

HUMAN DEVELOPMENT

CONTENT STANDARD 12.3 Analyze strategies that promote growth and development across the life span.

COMPETENCIES

- 12.3.1 Examine the role of nurturance on human growth and development.
- 12.3.2 Examine the role of communication on human growth and development.
- 12.3.3 Examine the role of support systems in meeting human growth and development needs.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)

PROCESS QUESTIONS 12.3

Thinking

- What strategies promote or constrain healthy development through the life span?
- What factors influence the use of various strategies?
- How will society benefit or be harmed by structure and nurturing practices within family systems?

Communication

- What communication skills do we need in order to promote healthy growth and development?
- What questions do we ask in order to gain an understanding of the strategies that promote healthy development?
- In what ways do we communicate with others that contribute to human growth and development across the life span?

Leadership

- What are the group criteria for appraising strategies that affect human needs?
- How do we know if we are facilitating group understanding of the criteria for assessing strategies that promote development?
- What actions do we take to work collaboratively with others in assessing strategies that promote development throughout the life span?

PROCESS QUESTIONS (Continued)

Management

- What are the steps in appraising strategies which promote healthy development? Who would be affected? When would they be implemented? What would be appropriate?
- What criteria should be used in appraising the effectiveness of strategies for the promotion of healthy development?
- What is the ethical, social, personal effect of implementing various strategies throughout the life span?

COMPREHENSIVE STANDARD

Interpersonal
Relationships

13.0 Demonstrate respectful and caring relationships in the family, workplace, and community.

CONTENT STANDARDS

13.1 Analyze functions and expectations of various types of relationships.

13.2 Analyze personal needs and characteristics and their impact on interpersonal relationships.

13.3 Demonstrate communication skills that contribute to positive relationships.

13.4 Evaluate effective conflict prevention and management techniques.

13.5 Demonstrate teamwork and leadership skills in the family, workplace, and community.

13.6 Demonstrate standards that guide behavior in interpersonal relationships.

INTERPERSONAL RELATIONSHIPS

CONTENT STANDARD 13.1 Analyze functions and expectations of various types of relationships.

COMPETENCIES

- 13.1.1 Examine processes for building and maintaining interpersonal relationships.
- 13.1.2 Examine the impact of various stages of the family life cycle on interpersonal relationships.
- 13.1.3 Compare physical, emotional, and intellectual responses in stable and unstable relationships.
- 13.1.4 Determine factors that contribute to healthy and unhealthy relationships.
- 13.1.5 Explore processes for handling unhealthy relationships.
- 13.1.6 Determine stress management strategies for family, work, and community settings.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary **(LA 1)**
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks **(LA 2)**
- Demonstrates competence in speaking to provide, distribute, or find information **(LA 4)**
- Adapts listening strategies to utilize verbal and nonverbal content of communication **(LA 6)**

INTERPERSONAL RELATIONSHIPS

PROCESS QUESTIONS 13.1

Thinking

- What are the characteristics of a respectful, healthy relationship? What are the functions of the various types of relationships?
- Why is it important to have respectful, healthy relationships?
- What should we do to create respectful, healthy relationships?

Communication

- How do we show respectful, healthy relationships?
- What viewpoints do others have? Where did they originate?
- How do respectful, healthy relationships contribute to communication in the community? What are the consequences (positive and negative) of stress on communication in relationships?

Leadership

- What leadership skills do we need to create respectful, healthy relationships?
- What traditions and social norms contribute to respectful, healthy relationships?
- What changes should we make to have respectful, healthy relationships? What are the consequences of dealing or not dealing with stress on relationships and work productivity?

PROCESS QUESTIONS (Continued)

Management

- What resources do we have to create respectful, healthy relationships?
- What personal and environmental factors contribute to healthy and unhealthy relationships?
- What are the consequences of respectful, healthy relationships for self? families? community? society?

INTERPERSONAL RELATIONSHIPS

CONTENT STANDARD 13.2 Analyze personal needs and characteristics and their impact on interpersonal relationships.

COMPETENCIES

- 13.2.1 Examine the impact of personal characteristics on relationships.
- 13.2.2 Consider the effect of personal needs on relationships.
- 13.2.3 Examine the effect of self-esteem and self-image on relationships.
- 13.2.4 Determine the impact of life span events and conditions on relationships.
- 13.2.5 Explain the impact of personal standards and codes of conduct on interpersonal relationships.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

INTERPERSONAL RELATIONSHIPS

PROCESS QUESTIONS 13.2

Thinking

- What are our characteristics and needs? (physical, social, emotional, cognitive, creative)
- Who and what influence our characteristics and needs?
- What personal perspectives and characteristics adversely affect our relationships?

Communication

- How can we identify the perspectives, characteristics, and needs of others?
- What assumptions do we make from nonverbal cues when we meet people who are different from us, from their appearance? gender? race? ethnic background?
- How do our assumptions affect our relationships? negatively? positively?

Leadership

- What personal skills are needed to positively affect relationships?
- How do cultural traditions influence our relationships?
- What actions can we take to improve our relationships?

PROCESS QUESTIONS (Continued)

Management

- What steps do we need to take to affect positive relationships?
- What can we learn about ourselves through self-evaluation?
- What ethical standards should guide our relationships?

INTERPERSONAL RELATIONSHIPS

CONTENT STANDARD 13.3 Demonstrate communication skills that contribute to positive relationships.

COMPETENCIES

- 13.3.1 Examine communication styles and their effects on relationships.
- 13.3.2 Demonstrate verbal and nonverbal behaviors and attitudes that contribute to effective communication.
- 13.3.3 Demonstrate effective listening and feedback techniques.
- 13.3.4 Examine barriers to communication in family, work, and community settings.
- 13.3.5 Practice ethical principles of communication in family, community, and work settings.
- 13.3.6 Examine the impact of communication technology in family, work, and community settings.
- 13.3.7 Examine the roles and functions of communication in family, work, and community settings.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (**LA 1**)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (**LA 2**)
- Demonstrates competence in speaking to provide, distribute, or find information (**LA 4**)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (**LA 6**)

INTERPERSONAL RELATIONSHIPS

PROCESS QUESTIONS 13.3

Thinking

- What communication skills contribute to healthy relationships?
- What contextual factors affect communication skills? personal skills? cultural skills? environment skills?
- What ethical effects will communication skills have on relationships?

Communication

- What communication skills do we need to learn? What are their distinguishing characteristics?
- What questions should we ask to clarify meanings? What new meanings do we gain by listening for understanding?
- What communication skills should we use? with friends? family? co-workers? employers? community members?

Leadership

- What communication skills do leaders need?
- What values and beliefs affect our communication skills? positively? negatively?
- What actions should leaders take to help others use effective communication skills?

PROCESS QUESTIONS (Continued)

Management

- What resources are available to help us develop communication skills?
- What criteria should be used to evaluate communication skills?
- What are the consequences of effective communication skills on relationships?

INTERPERSONAL RELATIONSHIPS

CONTENT STANDARD 13.4 Evaluate effective conflict prevention and management techniques.

COMPETENCIES

- 13.4.1 Determine the origin and development of attitudes and behaviors regarding conflict.
- 13.4.2 Determine how similarities and differences among people affect conflict prevention and management.
- 13.4.3 Determine the roles of decision making and problem solving in reducing and managing conflict.
- 13.4.4 Appraise nonviolent strategies that address conflict.
- 13.4.5 Choose effective responses to harassment.
- 13.4.6 Assess community resources that support conflict prevention and management.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (**LA 1**)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (**LA 2**)
- Demonstrates competence in speaking to provide, distribute, or find information (**LA 4**)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (**LA 6**)

INTERPERSONAL RELATIONSHIPS

PROCESS QUESTIONS 13.4

Thinking

- What causes conflict? What strategies could be used to prevent and manage conflict?
- What are the desired ends for conflict prevention and management?
- What strategies should we use to prevent and manage conflict?

Communication

- How do communication skills affect conflict prevention and management?
- How do we manage conflict? Where do we acquire our attitudes toward conflict management?
- What alternative strategies might be used to prevent and manage conflict?

Leadership

- What conflict prevention strategies can leaders use when dealing with friends? with family members? in meetings? at work?
- How will conflict management affect our group goals?
- What effects will these strategies have on self and others?

PROCESS QUESTIONS (Continued)

Management

- What steps do we need to take to prevent and manage conflict?
- Why is it important to prevent and manage conflict?
- What are the consequences of utilizing various methods of conflict management?

INTERPERSONAL RELATIONSHIPS

CONTENT STANDARD 13.5 Demonstrate teamwork and leadership skills in the family, workplace, and community.

COMPETENCIES

- 13.5.1 Create an environment that encourages and respects the ideas, perspectives, and contributions of all group members.
- 13.5.2 Demonstrate strategies to motivate and encourage group members.
- 13.5.3 Create strategies to utilize the strengths and limitations of team members.
- 13.5.4 Demonstrate techniques that develop team and community spirit.
- 13.5.5 Demonstrate ways to organize and delegate responsibilities.
- 13.5.6 Create strategies to integrate new members into the team.
- 13.5.7 Demonstrate processes for cooperating, compromising, and collaborating.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media (LA 5)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

PROCESS QUESTIONS 13.5

Thinking

- What are team skills?
- What does it mean to be on a team?
- What team skills should we use in the work place, with family, and in the community?

Communication

- What communication skills are needed for effective teamwork? In what ways can members be motivated and encouraged?
- What personal factors affect teamwork? What interferes with teamwork? What are the affects of domination? intolerance? stereotyping?
- What do we do about communicating feedback to encourage other team members?

Leadership

- What are the various roles of team members? What are the strengths and limitations of difficult team members?
- What should be done to utilize the strengths of team members?
- What are the consequences of not utilizing the strengths of team members?

Management

- What are the ways to organize teams?
- What are the consequences of using team skills in the family, workplace, and community?

INTERPERSONAL RELATIONSHIPS

CONTENT STANDARD 13.6 Demonstrate standards that guide behavior in interpersonal relationships.

COMPETENCIES

- 13.6.1 Examine types of standards for making judgments about interpersonal relationships.
- 13.6.2 Apply guidelines for assessing the nature of issues and situations.
- 13.6.3 Apply standards when making judgments and taking action.
- 13.6.4 Demonstrate ethical behavior in family, workplace, and community settings.
- 13.6.5 Examine the relative merits of opposing points of view regarding current ethical issues.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media (LA 5)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

INTERPERSONAL RELATIONSHIPS

PROCESS QUESTIONS 13.6

Thinking

- What are ethical standards?
- What ethical standards are used in our community? family? school? What are the origins of these standards?
- What ethical standards should guide my actions?

Communication

- How do we communicate our ethical standards to others?
- What is the relationship between our actions and our ethical standards?
- What are the consequences of using/not using ethical standards to guide behavior?

Leadership

- What ethical standards are needed by leaders? in families? organizations? workplace? community?
- What is the effect of conflicting ethical standards?
- What should a leader do when standards conflict?

PROCESS QUESTIONS (Continued)

Management

- What resources can help us establish ethical standards?
- Are there inconsistencies between our ethical standards and our actions, especially when no one is looking?
- What is the impact of ethical standards on our behavior?

COMPREHENSIVE STANDARD

Nutrition and
Wellness

14.0 Demonstrate nutrition and wellness practices that enhance individual and family well-being.

CONTENT STANDARDS

- 14.1 Analyze factors that influence nutrition and wellness practices across the life span.**
- 14.2 Evaluate the nutritional needs of individuals and families in relation to health and wellness across the life span.**
- 14.3 Demonstrate ability to acquire, handle, and use foods to meet nutrition and wellness needs of individuals and families across the life span.**
- 14.4 Evaluate factors that affect food safety, from production through consumption. (1)**
- 14.5 Evaluate the impact of science and technology on food composition, safety, and other issues.**

- (1) Review and input provided courtesy of the United States Department of Agriculture, Food Safety and Inspection Service; and the United States Food and Drug Administration, Center for Food Safety and Applied Nutrition.**

NUTRITION AND WELLNESS

CONTENT STANDARD 14.1 Analyze factors that influence nutrition and wellness practices across the life span.

COMPETENCIES

- 14.1.1 Examine physical, emotional, social, psychological, and spiritual components of individual and family wellness.
- 14.1.2 Compare the impact of psychological, cultural, and social influences on food choices and other nutrition practices.
- 14.1.3 Examine the governmental, economic, and technological influences on food choices and practices.
- 14.1.4 Investigate the impact of global and local events and conditions on food choices and practices.
- 14.1.5 Examine legislation and regulations related to nutrition and wellness issues.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (**LA 1**)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (**LA 2**)

PROCESS QUESTIONS 14.1

Thinking

- What are the factors contributing to nutritional practices and wellness across the life span?
- How has analyzing the factors changed over time?
- What impact do social influences have on food choices?

Communication

- What can we do to understand factors that influence nutritional practices and wellness across the life span?
- What insights do we have into influences on nutritional practices and wellness across the life span?
- In what ways does the use of communication contribute to the impact of food choices on the global community?

Leadership

- What skills do we need to explore societal, governmental, socio-economic, and technological influences related to food choices and practices?
- How do we know if we are conveying the skills needed to explore societal, governmental, socio-economic, and technological influences related to good choices and practices?
- What should be done to facilitate our awareness of factors that influence nutritional practices and wellness across the life span?

PROCESS QUESTIONS (Continued)

Management

- What happened when factors that influence nutritional practices and wellness across the life span were analyzed?
- After examining new perspectives that contribute to nutritional practices and wellness, what new meaning might be gained from these actions?
- What are the short-term consequences of food technology on the global community? long-term?

NUTRITION AND WELLNESS

CONTENT STANDARD 14.2 Evaluate the nutritional needs of individuals and families in relation to health and wellness across the life span.

COMPETENCIES	ACADEMIC PROFICIENCIES
<p>14.2.1 Assess the effect of nutrients on health, appearance, and peak performance.</p> <p>14.2.2 Research the relationship of nutrition and wellness to individual and family health throughout the life span.</p> <p>14.2.3 Assess the impact of food and diet fads, food addictions, and eating disorders on wellness.</p> <p>14.2.4 Appraise sources of food and nutrition information, including food labels, related to health and wellness.</p>	<p>Language Arts</p> <ul style="list-style-type: none">• Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)• Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2) <p>Mathematics</p> <ul style="list-style-type: none">• Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals (MA 1), (MA 2)• Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, and calculate square root (MA 3)• Mentally adds, subtracts, divides, and multiplies whole numbers (MA 4) <p>Science</p> <ul style="list-style-type: none">• Applies and uses maps, charts, tables and graphs to complete tasks (SC 042)• Describes human maintenance and weight gain or loss (SC 298, SC 309)

PROCESS QUESTIONS 14.2

Thinking

- What are the current standards for evaluating the nutritional content of food?
- What criteria can be used to help us decide how to evaluate the nutritional content of food? What end results promote health and wellness?
- What beliefs, actions, or conditions create limits or prevent the accomplishment of optimal wellness on the individual and family?

Communication

- How can we communicate to our families the need to evaluate the nutritional content of foods?
- What questions do we ask in order to evaluate the nutritional content of foods?
- What would be the consequences of not communicating these needs to our families?

Leadership

- What steps can we take to ensure that our families consume nutritionally balanced foods?
- What new meanings or insights have we become aware of concerning nutritional content of foods?
- What would happen in our families if we chose to put more emphasis on the nutritional content of food?

PROCESS QUESTIONS (Continued)

Management

- What happens if we disregard information regarding nutrition and wellness?
- What criteria would we use to determine if someone is practicing an unhealthy eating style, such as fad diets, food addictions, and eating disorders?
- What would be the long-term and short-term consequences of not considering the nutritional content of food for the individual? family?

NUTRITION AND WELLNESS

CONTENT STANDARD 14.3 Demonstrate ability to acquire, handle, and use foods to meet nutrition and wellness needs of individuals and families across the life span.

COMPETENCIES

- 14.3.1 Apply various dietary guidelines in planning to meet nutrition and wellness needs.
- 14.3.2 Design strategies that meet the health and nutrition requirements of individuals and families with special needs.
- 14.3.3 Demonstrate ability to select, store, prepare, and serve nutritious and aesthetically pleasing foods.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (**LA 1**)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (**LA 2**)

Mathematics

- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals (**MA 1**), (**MA 2**)
- Mentally adds, subtracts, divides, and multiplies whole numbers (**MA 4**)

Science

- Uses common laboratory equipment and procedures (**SC 1**)
- Applies and uses laboratory techniques safely (**SC 041**)
- Measures weight, temperature, time and the volumes of liquids and solids (**SC 493**, **SC 495**, **SC 496**, **SC 497**)

PROCESS QUESTIONS 14.3

Thinking

- What contextual factors should be considered to meet the nutritional needs of individuals and families across the life span?
- What personal factors will affect our decisions in preparing and serving food?
- What might the consequences on the well-being of individuals, families, and societies be when foods are not prepared and served to meet nutritional needs?

Communication

- What do we do about planning, preparing, and serving foods that meet the nutritional needs of families and individuals across the life span?
- How do environmental, social, cultural, and political factors affect our decisions about preparing and serving foods to meet nutritional needs of families and individuals across the life span?
- What might be the impact of food handling and preparation on the individual? family? What future actions could be recommended?

PROCESS QUESTIONS (Continued)

Leadership

- What are goals in planning, preparing, and serving foods to meet nutritional needs of individuals and families?
- What goals do other group members have in planning, preparing, and serving foods to meet nutritional needs of individuals and families?
- What should be done to inspire a clear vision of the importance of preparing and serving foods to meet nutritional needs of individuals?

Management

- What resources are needed to prepare nutritious and aesthetically pleasing foods?
- What resources are available that might help us prepare and serve food to meet nutritional needs of individuals and families?
- What are the consequences of using the resources that might help us prepare and serve food to meet nutritional needs of individuals and families?

NUTRITION AND WELLNESS

CONTENT STANDARD 14.4 Evaluate factors that affect food safety, from production through consumption. (1)

COMPETENCIES

- 14.4.1 Determine conditions and practices that promote safe food handling.
- 14.4.2 Appraise safety and sanitation practices throughout the food chain.
- 14.4.3 Determine how changes in national and international food production and distribution systems impact the food supply.
- 14.4.4 Appraise federal, state, and local inspection and labeling systems that protect the health of individuals and the public.
- 14.4.5 Monitor food borne illness as a health issue for individuals and families.
- 14.4.6 Review public dialogue about food safety and sanitation.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

Science

- Describes and explains diseases (SC 291)
- Identifies organisms such as bacteria and fungi (SC 480, SC 481)

PROCESS QUESTIONS 14.4

Thinking

- What food handling and storage practices meet the health and safety needs of individuals and families? What are the concerns throughout the food chain?
- What factors affect food handling and storage practices?
- What food handling and storage practices should we advocate for individuals, families, and society to meet health and safety needs?

Communication

- How can we communicate about food safety in the steps from production to consumption?
- What insights do we have into individual differences regarding food handling and storage practices to meet safety and health needs?
- In what ways does the use of communication contribute to food safety?

Leadership

- How can we act as leaders and set goals to understand community rules for food handling and storage packaging?
- How can we work with others to set food handling and storage goals that meet the health and safety needs of individuals and families?
- What should be done to facilitate food safety, from production to consumption?

PROCESS QUESTIONS (Continued)

Management

- What steps are needed to accomplish the goal of safe food handling and storage?
- What criteria should be used to determine safe food handling and storage techniques?
- What might be the consequences (positive and negative) of how we manage food handling and storage on the individual, family, and society?

NUTRITION AND WELLNESS

CONTENT STANDARD 14.5 Evaluate the impact of science and technology on food composition, safety, and other issues.

COMPETENCIES

- 14.5.1 Determine how scientific and technical advances impact the nutrient content, availability, and safety of foods.
- 14.5.2 Assess how the scientific and technical advances in food processing, storage, product development, and distribution impact nutrition and wellness.
- 14.5.3 Determine the impact of technological advances on selection, preparation, and home storage of food.
- 14.5.4 Assess the effects of food science and technology on meeting nutritional needs.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)

Science

- Analyze chemicals in society (SC 001)
- Analyzes and evaluates environmental issues (SC 007)

PROCESS QUESTIONS 14.5

Thinking

- What impact have science and technology had on food, nutrition, and wellness?
- How will technology affect our decisions to help achieve wellness?
- How has the impact of science and technology on food, nutrition, and wellness affected individuals and families? How will society benefit from this? be harmed by this?

Communication

- How can we communicate the effects of food science and technology in meeting nutritional needs?
- What insights do we have into how scientific and technical advancements have impacted the nutrient content, availability, and safety of foods?
- In what ways does the use of communication contribute to the impact of science and technology on food composition, food safety, and nutrition?

Leadership

- What skills do we need to critique scientific and technological advances in food process industry?
- How do we know if we are effectively accessing current technology to locate food and nutrition information?
- What effect would the consequences (positive and negative) of technology have on our groups?

PROCESS QUESTIONS (Continued)

Management

- What are our technology goals and how will they affect food choices and the wellness of individuals and families?
- What resources do others have that might help us understand how scientific and technological advancements have impacted the nutritional content, availability, and safety of foods?
- What are the consequences of not using available resources when making decisions relating to food composition and safety?

COMPREHENSIVE STANDARD

Parenting

15.0 Evaluate the impact of parenting roles and responsibilities on strengthening the well-being of individuals and families.

CONTENT STANDARDS

15.1 Analyze roles and responsibilities of parenting.

15.2 Evaluate parenting practices that maximize human growth and development.

15.3 Evaluate external support systems that provide services for parents.

15.4 Analyze physical and emotional factors related to beginning the parenting process.

PARENTING

CONTENT STANDARD 15.1 Analyze roles and responsibilities of parenting.

COMPETENCIES

- 15.1.1 Examine parenting roles across the life span.
- 15.1.2 Examine expectations and responsibilities of parenting.
- 15.1.3 Determine consequences of parenting practices to the individual, family, and society.
- 15.1.4 Determine societal conditions that impact parenting across the life span.
- 15.1.5 Explain cultural differences in roles and responsibilities of parenting.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

PROCESS QUESTIONS 15.1

Thinking

- What societal conditions influence parenting at various stages of the life cycle? What are the roles that adults assume when they become parents?
- What viewpoints do others have about the roles of parenthood and how are these viewpoints formed?
- What contradictions exist between the perception of parenthood and the realities of parenthood?

Communication

- How do we form our beliefs about the roles and responsibilities of parenthood?
- What new meanings or insights have we become aware of as a result of communicating the roles and responsibilities of parenthood?
- What do we do about communicating the roles and responsibilities of parenthood to families and communities?

PROCESS QUESTIONS (Continued)

Leadership

- What are the goals for assuming a parent leadership role?
- What do our actions as leaders mean to families, communities, and society? What values, goals, and beliefs do family members have regarding the societal conditions that impact parenting?
- What actions can we take to solve the problems of inadequate parenting? What are the consequences of not taking a leadership role to solve the problems of inadequate parenting?

Management

- What are the goals of parenthood? How do we accomplish these goals? How can we manage societal conditions?
- What criteria should be used in developing a management plan for balancing the roles and responsibilities of parenthood? What resources do others have that might help us manage societal conditions?
- What is the best action to take ethically, economically, and socially for managing the roles and responsibilities of parenthood?

PARENTING

CONTENT STANDARD 15.2 Evaluate parenting practices that maximize human growth and development.

COMPETENCIES

- 15.2.1 Choose nurturing practices that support human growth and development.
- 15.2.2 Select communication strategies that promote positive self-esteem in family members.
- 15.2.3 Assess common practices and emerging research about discipline on human growth and development.
- 15.2.4 Assess the impact of abuse and neglect on children and families and determine methods for prevention.
- 15.2.5 Determine criteria for selecting care and services for children.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

PROCESS QUESTIONS 15.2

Thinking

- What are the parenting practices that support or constrain human growth and development throughout the life span?
- What factors will influence our decisions regarding parenting practices throughout the life span?
- What parenting skills and practices should we advocate that would support well-being of family members throughout the life span?

Communication

- What communication strategies support the emotional well-being of family members?
- What emotions are conveyed and reinforced through communication strategies?
- What are the best actions to take regarding communication which would foster development throughout the life span?

PROCESS QUESTIONS (Continued)

Leadership

- How do we act as leaders to achieve group goals regarding parent skills and practices?
- What beliefs do we model regarding parenting practices for maximum human growth and development?
- Through a national FHA/HERO program, what action can be taken to advocate parenting skills and practices that promote development?

Management

- What are the personal and family resources needed to support developmental well-being throughout life span?
- What are the goals of family members that would influence the use of resources?
- How do we support developmental well-being through management of family resources (time, energy, economics)?

PARENTING

CONTENT STANDARD 15.3 Evaluate external support systems that provide services for parents.

COMPETENCIES

- 15.3.1 Assess community resources and services available to families.
- 15.3.2 Appraise community resources that provide opportunities related to parenting.
- 15.3.3 Review current laws and policies related to parenting.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

PROCESS QUESTIONS 15.3

Thinking

- What are the existing public policies, agencies, services that support or constrain parenting?
- What criteria should be used to evaluate policies, agencies, and services that support or constrain parenting?
- What would happen if there were no public policies or resources to support parenting?

Communication

- What communication skills do we need to use to investigate public policy, agencies, institutions, and services that impact parenting?
- What meanings have we gained regarding the role of parenting by investigating public policy, agencies, and services that impact parenting?
- In what ways can we use communication to investigate laws, services, and agencies and institutions that impact parenting?

Leadership

- How do we cooperate as a group to identify public policies and agencies that impact parenting?
- What group goals have we established for the investigation of public policies and agencies?
- What group action can we take to influence public policies and agencies that impact parenting?

PROCESS QUESTIONS (Continued)

Management

- What are the public policies, agencies, and services available to manage parenting responsibilities?
- Why is it important to use resources when managing parenting responsibilities?
- What are the consequences for managing work and family when public and private resources are not available to parents?

PARENTING

CONTENT STANDARD 15.4 Analyze physical and emotional factors related to beginning the parenting process.

COMPETENCIES

- 15.4.1 Examine biological processes related to prenatal development, birth, and health of child and mother.
- 15.4.2 Consider the emotional factors of prenatal development and birth in relation to the health of the parents and child.
- 15.4.3 Examine implications of alternatives to biological parenthood.
- 15.4.4 Determine legal and ethical impacts of technology.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)

Science

- Understands the effect of chemicals on humans and plants (SC 3)
- Analyzes and evaluates environmental issues (SC 007)
- Describes human development processes (SC 289)
- Describes and explains the human reproductive system (SC 304)

PROCESS QUESTIONS 15.4

Thinking

- What contextual factors should be considered in determining what is a healthy beginning for parents and children?
- What criteria would we use to determine reliable sources of information regarding healthy emotional and physical beginnings for parents and children?
- What actions should be taken to assure a healthy emotional and physical beginning for parents and children?

Communication

- How do emotional factors affect communication (positively and negatively)?
- What processes are involved in respectful communication strategies and techniques?
- How do we take action, minimize roadblocks to communication when discussing biological processes related to prenatal development and birth?

PROCESS QUESTIONS (Continued)

Leadership

- What skills would we need to work collaboratively to impact healthy beginnings for parents and children?
- What values, meanings, and beliefs do others have about healthy beginnings for parents and children?
- Using a national FHA/HERO program, how could our group work collaboratively to advocate healthy, emotional and physical beginnings for parents and children?

Management

- What are our goals regarding balancing social/work responsibilities and the physical and emotional requirements to assure healthy beginnings?
- What personal and environmental factors will effect how we manage social/work responsibilities and best practices for healthy beginning for parents and children?
- What actions can be taken to manage the contradictions between society's demands on new and prospective parents and the physical and emotional requirements to assure healthy beginnings (family leave, workplace demands, adequate health care)?

COMPREHENSIVE STANDARD

Textiles and
Apparel

16.0 Integrate knowledge, skills, and practices required for careers in textiles and apparel.

CONTENT STANDARDS

- 16.1 Analyze career paths within textiles and apparel design industries.**
- 16.2 Evaluate fiber and textiles materials.**
- 16.3 Demonstrate apparel and textiles design skills.**
- 16.4 Demonstrate skills needed to produce, alter, or repair textiles products and apparel.**
- 16.5 Evaluate elements of textiles and apparel merchandising.**
- 16.6 Evaluate the components of customer service.**
- 16.7 Demonstrate general operational procedures required for business profitability and career success.**

TEXTILES AND APPAREL

CONTENT STANDARD 16.1 Analyze career paths within textiles and apparel design industries.

COMPETENCIES

- 16.1.1 Determine the roles and functions of individuals engaged in textiles and apparel careers.
- 16.1.2 Explore opportunities for employment and entrepreneurial endeavors.
- 16.1.3 Examine education and training requirements and opportunities for career paths in textiles and apparel services.
- 16.1.4 Examine the impact of textiles and apparel occupations on local, state, national, and global economies.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks (LA 2)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)

Mathematics

- Interprets charts, tables, and graphs (MA 174)

Science

- Uses computers for information processing (SC 499)

PROCESS QUESTIONS 16.1

Thinking

- What careers are involved in the textiles and apparel industry? What information about careers do we need?
- What criteria might we use to choose a career in the textiles and apparel industry?
- Why is it important to research careers in the textiles and apparel industry? What values support our career decision?

Communication

- What communication skills are necessary for a career in the field of textiles and apparel?
- What questions need to be answered in order to make a wise career selection in the apparel industry?
- What are the consequences of selecting a career in the textiles and apparel industry?

Leadership

- What leadership qualities are needed to be an entrepreneur in the textiles and apparel industry?
- How do our leadership skills affect career entrepreneur success or failure?
- What strategies would bring about changes in the perception of the textiles and apparel industry?

PROCESS QUESTIONS (Continued)

Management

- What resources and training are required for a career in the textiles and apparel industry?
- What personal factors affect our career choices and goals in this industry?
- What might be the best action to take on a career path in the textiles and apparel industry?

TEXTILES AND APPAREL

CONTENT STANDARD 16.2 Evaluate fiber and textiles materials.

COMPETENCIES

- 16.2.1 Select appropriate terminology for identifying, comparing, and analyzing the most common generic textiles fibers.
- 16.2.2 Determine performance characteristics of fiber and textiles.
- 16.2.3 Review textiles legislation, standards, and labeling in the global economy.
- 16.2.4 Assess effects of textiles characteristics on design, construction, care, use, and maintenance of products.
- 16.2.5 Select appropriate procedures for care of textiles products.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

Science

- Analyze chemicals in society (SC 001)
- Applies and uses laboratory techniques safely (SC 041)
- Applies and uses maps, charts, tables and graphs to complete tasks (SC042)
- Describes and explains chemical reactions (SC 114)
- Uses computers for information processing (SC 499)

PROCESS QUESTIONS 16.2

Thinking

- What factors related to fiber and textiles should be considered when deciding which one will be used? What are the uses? What information about fiber and textiles do we need to know?
- What factors will affect our decisions about fiber and textiles use?
- What alternatives may be considered when choosing fibers and textiles? What affect will the fiber and textiles have for the end user? for the clients?

Communication

- What information about fibers and textiles do we need to know to make appropriate selections?
- What questions do we need to ask in order to clarify the evaluation of fiber and textiles materials?
- What are the consequences (positive and negative) of assessing the effects of textiles on design, construction, care, use, and maintenance of products?

PROCESS QUESTIONS (Continued)

Leadership

- What are our goals for examining textiles standards and labeling in the global economy?
- What criteria should be used to decide how to select appropriate procedures for care of textiles products?
- What should be done to improve textiles standards and labeling in the global economy? What effect will this have on the industry?

Management

- What are the steps to examine performance characteristics of fiber textiles?
- What criteria should be used to help make decisions concerning fiber and textiles usage?
- Considering our criteria related to fiber and textiles decisions, was this the best action to take related to economics? environment? aesthetics?

TEXTILES AND APPAREL

CONTENT STANDARD 16.3 Demonstrate apparel and textiles design skills.

COMPETENCIES

- 16.3.1 Examine the ways in which fabric, texture, and pattern can affect visual appearance.
- 16.3.2 Apply basic and complex color schemes and color theory to develop and enhance visual effects.
- 16.3.3 Utilize elements and principles of design in designing, constructing, and/or altering textiles products.
- 16.3.4 Demonstrate design concepts with material or computer, using draping and/or flat pattern making technique.
- 16.3.5 Implement design that takes into consideration ecological, environmental, sociological, psychological, technical, and economic trends and issues.
- 16.3.6 Apply elements and principles of design to assist consumers and businesses in making decisions.
- 16.3.7 Demonstrate ability to use technology for fashion design.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)

ACADEMIC PROFICIENCIES (Continued)

- Demonstrates competence in using various information sources, including knowledge-based and technical texts to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

Mathematics

- Adds, subtracts, divides, and multiplies whole numbers (MA 1)
- Adds, subtracts, divides, multiplies, mixed numbers, fractions, and decimals (MA 2)
- Uses a calculator to add, subtract, divide, multiply, whole and mixed numbers, decimals, and calculate square root (MA 3)
- Mentally adds, subtracts, divides and multiplies whole numbers (MA 4)
- Uses a calculator to add, subtract, divide, and multiply, calculate percentages, ratios (MA 5)
- Understands and applies basic methods of measurement (MA 6)
- Calculates and evaluates precision measurements (MA 014)
- Measures distance using standard measurement tools (MA 181)

Science

- Applies and uses maps, charts, tables and graphs to complete tasks (SC042)
- Uses computers for information processing (SC 499)

PROCESS QUESTIONS 16.3

Thinking

- What contextual factors should be considered when applying elements and principles of design?
- What factors will affect our decision on applying elements and principles of design to assist the industry?
- How is our information relevant to the implementation of design skills?

Communication

- What do we want our textiles design to communicate to the fashion industry and the consumer?
- What questions do we ask in order to clarify which fabric, texture, and pattern can affect visual appearance?
- What is the effect of communication (effective and ineffective) on the use of technology for fashion design?

Leadership

- What skills are needed in apparel and textiles design? What consumer information is needed in planning designs?
- What criteria are needed to ensure that information is effectively conveyed to the designer?
- What are the positive and negative consequences on the design industry of discarding the views of the consumer?

PROCESS QUESTIONS (Continued)

Management

- What are the goals of the apparel and textiles industry? What resources and equipment are available to reach these goals?
- How do personal factors affect the goals of the apparel and textiles industry?
- How do our goals affect the goals of others in the apparel and textiles industry? locally? globally?

TEXTILES AND APPAREL

CONTENT STANDARD 16.4 Demonstrate skills needed to produce, alter, or repair textiles products and apparel.

COMPETENCIES

- 16.4.1 Use a variety of equipment, tools, and supplies for apparel and textiles construction, alteration, and repair.
- 16.4.2 Examine production processes for creating fibers, yarn, woven, and knit fabrics, and non-woven textiles products.
- 16.4.3 Use appropriate industry materials for cleaning, pressing, and finishing textiles products.
- 16.4.4 Explore current technology and trends that facilitate design and production of textiles products and apparel.
- 16.4.5 Demonstrate basic skills for producing and altering textiles products and apparel.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts to perform specific tasks (LA 2)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

Mathematics

- Adds, subtracts, divides, and multiplies whole numbers (MA 1)
- Adds, subtracts, divides, multiplies, mixed numbers, fractions, and decimals (MA 2)
- Uses a calculator to add, subtract, divide, multiply, whole and mixed numbers, decimals, and calculate square root (MA 3)
- Mentally adds, subtracts, divides and multiplies whole numbers (MA 4)
- Uses a calculator to add, subtract, divide, and multiply, calculate percentages, ratios (MA 5)
- Understands and applies basic methods of measurement (MA 6)
- Calculates and evaluates precision measurements (MA 014)
- Measures distance using standard measurement tools (MA 181)

PROCESS QUESTIONS 16.4

Thinking

- What are the present standards for basic construction techniques?
- What are the desired ends of basic construction techniques? How do the present standards affect the end result?
- What are the consequences of following or not following the present standards of basic construction?

Communication

- How do we communicate the skills needed for basic construction techniques?
- What questions do we need to ask to clarify understanding of basic construction techniques?
- What are the consequences of producing a textiles product without a clear understanding of the basic construction techniques?

Leadership

- What are our goals when constructing textiles products?
- How do we communicate our goals related to clothing construction to others in the field?
- What are the consequences of not reaching our goals for ourselves? for the industry?

PROCESS QUESTIONS (Continued)

Management

- What is required in construction to produce, alter, or repair a textiles product? What equipment is available?
- What criteria are used to establish standards to guide construction activities? What skills are required in relation to equipment available?
- What are the consequences associated with choosing appropriate construction activities?

TEXTILES AND APPAREL

CONTENT STANDARD 16.5 Evaluate elements of textiles and apparel merchandising.

COMPETENCIES

- 16.5.1 Review marketing strategies for apparel and textiles products.
- 16.5.2 Assess the cost of constructing, manufacturing, altering, or repairing textiles products.
- 16.5.3 Assess ethical considerations for merchandising apparel and textiles products.
- 16.5.4 Review external factors that influence merchandising.
- 16.5.5 Critique varied methods for promoting apparel and textiles products.
- 16.5.6 Select research methods, including forecasting techniques, for marketing apparel and textiles products.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

Mathematics

- Adds, subtracts, divides, and multiplies whole numbers (MA 1)
- Adds, subtracts, divides, multiplies, mixed numbers, fractions, and decimals (MA 2)
- Uses a calculator to add, subtract, divide, multiply, whole and mixed numbers, decimals, and calculate square root (MA 3)
- Mentally adds, subtracts, divides and multiplies whole numbers (MA 4)
- Uses a calculator to add, subtract, divide, and multiply, calculate percentages, ratios (MA 5)

PROCESS QUESTIONS 16.5

Thinking

- What are marketing strategies for merchandising textiles and apparel products?
- What do we hope marketing strategies for merchandising textiles will accomplish?
- What are the consequences of using unethical marketing strategies for the consumer? merchandiser? manufacturer?

Communication

- What communication skills are needed to be successful in the merchandising of textiles and apparel?
- What is communicated in the feedback received from consumers in regards to textiles?
- In what ways does communication contribute to the success of textiles and apparel merchandising?

Leadership

- What leadership skills are needed to be a successful merchandiser?
- How do we know if we are listening to the consumers for understanding/shared meaning?
- What are the consequences of strong and weak leadership in textiles and apparel merchandising?

PROCESS QUESTIONS (Continued)

Management

- What are the goals of textiles and apparel merchandising? What resources are available to reach those goals? What steps need to be taken to accomplish merchandising goals?
- What criteria will be used to guide our merchandising decisions? What personal factors will affect our ability to achieve these goals?
- How do our merchandising goals impact the goals of others?

TEXTILES AND APPAREL

CONTENT STANDARD 16.6 Evaluate the components of customer service.

COMPETENCIES

- 16.6.1 Assess factors that contribute to quality customer relations.
- 16.6.2 Assess the impact of cultural diversity as a factor in customer relations.
- 16.6.3 Determine the skills necessary for quality customer service.
- 16.6.4 Determine solutions to address customer concerns.

ACADEMIC PROFICIENCIES

Language Arts

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (**LA 1**)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts to perform specific tasks (**LA 2**)
- Demonstrates competence in speaking to provide, distribute, or find information (**LA 4**)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (**LA 6**)

PROCESS QUESTIONS 16.6

Thinking

- What are the components of customer service?
- What are the desired ends of good customer service?
- Whose interests are served in quality customer service?

Communication

- What communication skills are needed for customer service? How can we communicate effectively?
- How do we determine or evaluate customer satisfaction? What questions do we ask to clarify customer requests?
- What are the consequences of collaboration? negotiation of conflict? cooperating with customers?

Leadership

- What customer service techniques are needed to be an effective leader?
- What actions do we take to ensure that appropriate techniques are employed when dealing with customers?
- What actions should be taken to solve customer problems?

PROCESS QUESTIONS (Continued)

Management

- How can we act efficiently to ensure quality customer service?
- What criteria should be used to assess the impact of cultural diversity on customer service?
- What is the best action to take when dealing with customers? ethically? economically?

TEXTILES AND APPAREL

CONTENT STANDARD 16.7 Demonstrate general operational procedures required for business profitability and career success.

COMPETENCIES

- 16.7.1 Examine legislation, regulations, and public policy affecting the textiles and apparel industry.
- 16.7.2 Examine personal and employer responsibilities and liabilities regarding industry-related safety, security, and environmental factors.
- 16.7.3 Examine the effects of security and inventory control strategies, cash and credit transaction methods, laws, and worksite policies, on loss prevention and store profit.
- 16.7.4 Demonstrate procedures for reporting and handling accidents, safety and security incidents.
- 16.7.5 Examine operational costs such as mark ups, mark downs, cash flow, and other factors affecting profit.
- 16.7.6 Demonstrate knowledge of the arts, of various resources, and cultural impact upon the textiles and apparel industry.

ACADEMIC PROFICIENCIES

Language Arts

- Applies reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary (LA 1)
- Demonstrates competence in using various information sources, including knowledge-based and technical texts to perform specific tasks (LA 2)
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation (LA 3)
- Demonstrates competence in speaking to provide, distribute, or find information (LA 4)
- Adapts listening strategies to utilize verbal and nonverbal content of communication (LA 6)

Mathematics

- Adds, subtracts, divides, and multiplies whole numbers (MA 1)
- Adds, subtracts, divides, multiplies, mixed numbers, fractions, and decimals (MA 2)
- Uses a calculator to add, subtract, divide, multiply, whole and mixed numbers, decimals, and calculate square root (MA 3)
- Mentally adds, subtracts, divides and multiplies whole numbers (MA 4)
- Uses a calculator to add, subtract, divide, and multiply, calculate percentages, ratios (MA 5)
- Understands and applies basic methods of measurement (MA 6)

Science

- Analyzes chemicals in society (SC 001)
- Analyzes and evaluates environmental issues (SC 007)

PROCESS QUESTIONS 16.7

Thinking

- What employability skills are needed for business profitability and career success?
- What factors affect business profitability?
- Are these employability skills defensible? reasonable? adequate?

Communication

- What interpersonal skills are needed for business profitability and career success?
- What insights do we have regarding individual career success? How do interpersonal skills affect individual success?
- In what ways does the use of communication contribute to business profitability?

Leadership

- What role does leadership play in career success and business profitability?
- What actions can we take as leaders to ensure career success and profitability?
- What are the positive and negative consequences of our actions as leaders?

PROCESS QUESTIONS (Continued)

Management

- What are our goals? What information do we need for business profitability and success?
- What criteria should be used to determine skill levels required to meet standard practices?
- What is the impact of employability skill levels on career goals? How do the goals and levels determine career success?

Section III

IMPLEMENTATION STRATEGIES

Chapter 5

State Leadership Strategies for FACS Standards

Introduction

Each state makes determinations about how it may address standards. Several questions may be considered:

- At what point are we in the development of our state standards? Are we looking toward developing standards for the first time? Are we aligning state and national standards?
- How do our state's goals relate to the national vision and standards?
- How do various audiences in our state view standards and their relationship to FACS programs?
- Is our state ready to move toward new standards and program decisions?
- Do we need to consider whether to align current state standards with FACS National Standards?
- What leadership do we need to exert to develop measurement and assessment strategies for standards?
- How do we move programs to coordinate with new sets of standards?
- What in-service and pre-service strategies do we need to consider to implement new standards, related programs, and assessment strategies?

State leadership responsibility is critical for successful implementation of standards (IEL, 1997).

There is recognition that "mechanisms are needed at the state level to promote integration (of national standards) into the curriculum frameworks and programs of study at the secondary and postsecondary levels and to help instructors use the related materials" (IEL, 1997). "State level personnel need to set the infrastructure into place and establish education networks to support and sustain standards implementation" (Wills & Kaufmann, 1997).

This chapter discusses various aspects of implementation strategies and potential leadership activities to guide state development of standards and related programs. The use of a state leadership team is recommended to carry out these activities.

State Leadership Team Formation

The FACS state leadership team may be assembled to determine how a particular state will address standards and related issues. It may include state department staff, teacher educators, secondary and postsecondary representatives, teachers, and others, such as business and industry leaders involved with the FACS program. The level of successful leadership is enhanced when teams who will be key to implementation are involved in the development of the state's standards. The team of leaders is to provide various viewpoints about how standards and related issues will be addressed and implemented in the state. This leadership team will provide the impetus for change within the discipline.

Change Strategies

FACS National Standards provide the elements to move the discipline into the future. This calls for a change strategy to assist all stakeholders in taking part in the development of the implementation plan. The changes desired by a state may be minor or major. If state standards are only to be aligned with national standards, with little change in programs expected, then the change strategy will be minor. If however, the state wishes to maximize the opportunity to rethink the program and move toward a new vision and new goals, a more aggressive plan may need to be pursued.

The future of FACS may rest on new perspectives the state leadership provides in recognizing the needs of individuals and families in the state. Leaders must identify the forces that drive changes in the state, be able to predict changes with some accuracy, and understand the interconnectedness of all systems and how to affect change (James, 1996).

Senge (1990) suggests that groups need to be "learning organizations," understand systems thinking, develop mental models, build shared visions, and learn as teams to master change. The state leadership team may consider not only how to become a "learning organization" in terms of change strategies, but also how to bring this concept to all FACS stakeholders. In order for standards to drive change, all stakeholders must share in the development of their vision and implementation strategies. The FACS National Standards developmental panels, focus groups, and Management Team had the opportunity to develop this shared vision; to become "learning organizations;" and to establish a creative, futuristic model for the development of national standards. States need this type of synergy in order to implement state level standards successfully!

Management of Change

Successful planning and implementation strategies for the establishment of state standards involve many issues:

- State vision—uniqueness of state
- Input from various audiences with statewide impact
- Alignment of current state standards with new national standards
- New state standards design
- Measurements and benchmarks development
 - Academics and FACS integration—crosswalking with state requirements
 - Competency measurements and benchmarks
 - Scenarios—contextual measurement and authentic situations
- Program development
 - Curriculum and instructional materials
 - Delivery approaches
- In-service and pre-service education
- Public relations with both internal and external groups

At the beginning, a general awareness of national and state standards is needed by FACS professionals, administrators, and other decision-makers for an understanding of the potential. The state leadership team can organize and manage the activities related to standards that will ensure their successful implementation. The team approach can bring various talents and viewpoints together to enrich the decision-making processes used. The state leadership team may need to set time lines that include short- and long-term activities. The plan may require as much time as a year to move standards into the implementation phase in local schools. It may take more time to completely address some issues. Activities should be planned to start at various intervals to keep interest high amongst practitioners. The first step will address the state vision.

The State Vision Is Basic to Standards Implementation

“What is our state’s vision regarding standards and related issues?”

The FACS national vision and mission provide clear direction for the development of standards at that level. Each state may need to determine if it has certain cultures, mores, and traditions that require special attention in relation to implementation of the FACS state vision and standards.

The state leadership team may wish to review or clarify their state philosophies in relation to the national vision and mission. The state leadership team may then develop a tentative set of goals for state standards and ask for several stakeholders to review it and to provide input.

After determining the state goals, the next step is to gain input from various audiences in relation to standards.

Input from a Variety of Audiences

"How do various audiences in our state view standards and their relationship to FACS Education programs?"

Several purposes exist for gaining input from a variety of audiences. These include:

- Gaining the insights of external audiences
- Clarifying the FACS state goals related to standards
- Thinking creatively and collectively toward a new FACS future
- Gaining further insight from FACS audiences

External Audiences

External audiences provide insights into FACS standards and potential goals not necessarily seen by FACS professionals. External audiences may include business and industry leaders, community and state leaders, special interest group representatives, education administrators, board members, and students. Representation of rural and urban regions, employers, workers, and parents may be considered. Viewpoints may be divergent, but these representatives assist the leadership team in understanding and establishing a unique set of standards and goals for the state.

An outgrowth of involvement of external audiences is the emergence of individuals who become "champions" for FACS. These individuals usually are in leadership or management roles in their businesses or communities, and they are committed to furthering specific areas of education. "Champions" can be very helpful in gaining community support, establishing new avenues of funding, and providing publicity.

Standards Goals Clarification

Another purpose of clarifying the FACS state goals for standards with various audiences is that it may assist with gaining support for future activities. This may involve clarifying the major thrusts of FACS to include its unique role involving family, career, and community connections; its emphasis on personal and family growth; and its occupational and career clusters related to state needs. Dispelling old images also may be important to the success of the standards effort.

Addition of Creativity

Yet another purpose for input from a variety of audiences is to provide greater creativity and synergy through the introduction of new individuals into the process. New ideas, new interpretations, and new interactions may provide the catalyst for developing a creative vision that exceeds initial expectations.

FACS Input

FACS professionals, the internal group, also need a formal means for input into standards establishment and implementation strategies. Many FACS professionals may be involved in change strategies for their programs and thus be candidates for leadership roles in this process. Those who are not ready to make changes in their programs and adopt new standards may not be contributors in the first year of standards establishment and implementation. Change theory suggests that leadership should start with those individuals ready for movement. They will encourage and inspire others. Some, however, as Derrick Moul suggests, may never be ready to change and will only detract others from moving ahead.

Leaders of change processes can evaluate an individual's desire and readiness for change on a continuum from nonuse to total integration, according to Louks, Newlove, & Hall, (1985). Understanding the level of involvement of individuals who are in the change process, may assist leaders in providing support for the implementation of new standards.

FACS professionals ready to establish new standards and implementation strategies may be the catalysts to work with external groups. They are able to provide model programs and forward thinking that can be witnessed, as well as visualized. They can assist external groups in understanding existing limitations that cause roadblocks to new programs and new standards implementation. Their role is extremely important in assisting the external group in understanding the importance of FACS and its new vision and mission.

State Leadership Team Activities Related to Input

The state leadership team may consider several factors in designing structures for input from external and internal groups. If the team does not provide the leadership to bring groups together and to encourage dialogue with external groups, little may change as the result of having national and state standards. To gain the insights needed from various audiences, a plan of what the goals are for the input sessions, the organization of the input, the form of feedback, and the use of the information must be set well before the first invitations are issued. The information should be collected and sorted in an organized manner to enable objective decision-making. Consideration may be given to the following topics as part of the rationale for feedback from various audiences:

- What Information relative to needs of individuals and families for work and family can be gained?
- How do key individuals and groups view FACS program goals and standards?
- What support is there to assist in gaining commitment and resources?
- What types of change in FACS programs and image do various audiences see?

Input from various audiences will assist FACS leadership in the decisions it makes, if the process is structured for maximum feedback and analysis value.

Summary

Input from a variety of audiences is valuable for the state leadership team to use in determining state vision and standards. External audiences may include "champions" for FACS that promote the new standards and related programs with others who can provide new funding sources, enhance the program image, and assist with implementation strategies. FACS professionals ready for change, need input early in the standards implementation process in order to develop model programs based on the new standards. The combination of external and internal groups may provide a synergy to be creative in the design of new programs.

The next two sections address whether new state standards and programs need to be designed or realigned with FACS National Standards.

New State Standards and Program Designs

Designing New Programs Using FACS National Standards

"Does the state need new standards and programs to meet the needs of students?"

Standards may be used to guide the development of entirely new programs and courses, based on the needs of various audiences within the state and the collective vision built by the state leadership team.

The state leadership must determine what the FACS program for the future should encompass, based on input from various audiences. Several questions may be considered:

- How will the needs of students five years from now be reflected in current program changes?
- How will the needs of businesses and industries for skilled employees affect what programs are developed?
- Do current FACS programs appeal to students?
- What will be the criteria for determining the extent to which our state FACS programs will change?

If the decision is to design new programs, the leadership team may consider a variety of strategies using the national standards as a framework. FACS National Standards offer valid and reliable standards developed and reviewed by more than 1,000 individuals involved in FACS, related to business and industry, and representing various communities. This provides a strong basis from which to design new programs.

Standards may be drawn from a large number of FACS areas of study to design such programs. Each content standard is self-contained and can be combined with any other one, regardless of the area of study. Examples of potential programs and courses include several models based on FACS National Standards:

- New program designs based on individual and family areas of study
- New course designs based on individual, family, and occupational areas of study
- New course structures based on the process perspective
- New program and course development using authentic contextual situations
- New occupational programs based on business, industry, and community needs

New Program Development Based on Individual and Family Areas of Study

In order to develop a new life skills program, content standards may be drawn from several FACS areas of study. One such program may involve these FACS National Standards areas:

Interpersonal Relationships; Parenting; Career, Community, and Family Connections; Family; Nutrition and Wellness; Consumer and Family Resources; and Human Development.

Not all content standards from each area of study are utilized, but only those determined to be essential for a particular program. Each content standard has attached competencies, academic proficiencies, and process questions to use in clarifying the program activities. Each content standard is self-contained and able to be transferred independently of others.

Variations on this theme can provide exciting new combinations of content and new perspectives for students of all ages.

New Course Development Based on Various Areas of Study

A new course may address different combinations of areas of study than those of the past. Combinations may range from incorporating selected standards from one individual and family area and occupational area to other combinations. A new course for students exploring careers related to human services and early childhood can be created by choosing standards from several areas:

Interpersonal Relationships; Parenting; Career, Community, and Family Connections; Family; Nutrition and Wellness; Family and Community Services; Early Childhood, Education, and Services; and the Process Standard.

The course can blend various areas of study to offer a creative mixture of occupational exploration with foundation knowledge and skills related to careers in two areas. Students could gain personal knowledge and skills as well as prepare for a variety of occupations related to services for children and adults of all ages and disabilities. The key is determining the new goals for the program and then custom designing the program by extracting the content standards from each area required to make a dynamic program and courses.

New Course Structures Based on the Process Perspective

Yet another design may begin with the process perspective. This course design can be based on the process standard and draw upon the content standards needed to address the questions being posed. This method utilizes the content standards as a bank of items from which to draw information for problem-solving, reasoning, reflecting, and critical thinking about an issue. A course can start with self, then move to families, then to careers, and finally to the community; or vice versa. The course structure may reflect a content area and identify recurring problems to be addressed.

With imagination and creativity, the variety of courses that can be created is infinite. Again, the key is determining the goals for programs to meet the needs of the state population.

New Program and Course Development Using Authentic Contextual Situations

Designs for new FACS programs to address the needs of individuals, families, communities, businesses, and special populations may have new titles and new combinations of content based on contextual situations. Authentic contextual programs are based on real-life situations and draw from many FACS areas of study. Standards and related activities are used as the structure for program development. Unlike programs developed for a typical school catalog, these are more fluid and meet the needs of enrollees. Delivery of FACS programs may change rapidly in the next few years, as more individuals seek to enhance their living and working skills to meet distinctive needs. Program developers may need to be ready to custom-design programs to meet the needs of individuals and families in the future. Programs may be offered using a variety of delivery systems, such as the community, the Internet, service learning, or FHA/HERO activities.

As states begin to establish scenarios, standards may be developed to accompany these scenarios in order to create micro courses. The competencies and academic proficiencies can provide an information base, while the process column leads the inquiry method.

Multi-Dimensional Learning Programs

Education programs of the future will be integrated, multi-faceted, and offered in authentic settings. As states explore new structures for programs, multi-dimensional opportunities present themselves. FACS programs could be integrated with academic programs. Community-based delivery of programs may move the potential for unique learning environments into a new dimension. Business and industry are potential partners for free-form new programs that relate students to careers, families, and the community. Consideration for multi-generational programs is expanding with community colleges and secondary schools offering programs involving all ages together in classes.

Agencies are working together to offer education, social services, health care, job opportunities, and other services for families. New dimensions are being explored in critical-science perspectives with process orientation to assist in teaching learning as related to a variety of contexts. As James (1996) suggests, looking at new dimensions requires groups and individuals to acquire new perspectives. She suggests that several elements need to be present to allow a group of individuals to think toward the future. These elements include the ability to recognize insights and intuition, knowledge of the field, an understanding of the cultural history of the area, a high tolerance for chaos, multiple sources of information, residency, the ability to emphasize, and time to visualize.

Establishing multi-dimensional programs will take more than minimum time to generate new ideas, coalesce groups, and gain new insights to develop creative programs. The methods of delivery may be equally as important as the standards content. As learning becomes part of the objectives and the delivery methods, greater insights and additional thought are needed to visualize new designs to create a new future for FACS.

Selecting Standards To Meet Business, Industry, and Community Needs

When new programs are designed for occupational clusters, the business and industry representatives from career clusters being considered should be part of the development. As the future employers of students, they are able to identify the knowledge, skills, and practices that are required for students to enter, as well as advance, in careers related to their businesses. New program combinations may be needed, but should be considered with the assistance of business and industry, and with articulation partners at the postsecondary level.

For example, one popular combination of occupational areas involves hotel, motel, restaurant, and facilities maintenance. The content standards to make up a program may be drawn from the FACS National Standards:

Hospitality, Recreation, and Tourism; Food Production and Services; and Facilities Management and Maintenance.

The state standards are selected based on input from a state industry committee. Other occupational clusters may offer new opportunities for careers such as family and community services, where it is expected the need for workers will greatly increase in the next 10 years. However, these may not be the projections for all states. It is important to examine the state's labor market data officially developed by the Labor Market Information Service in each state. If sufficient job openings are not identified, caution should be used even in developing exploratory courses.

In some areas it may be beneficial to work with representatives from another vocational-technical education field to create a unique program where students will gain skills for more than one discipline. Also, credentialing and licensing for occupations may need to be considered on a state basis, as requirements vary. For example, health and sanitation requirements related to food service vary from state to state, but are applicable to all food service workers nationwide. Also, child care workers are licensed in certain states, but not in others.

State Leadership Team Activities Related to the Development of New Programs

The state leadership team has to determine if it will make the decisions related to new FACS programs or if the team will be expanded for this purpose. In either case, decisions will need to be made related to the development of new programs or realignment of current state standards with FACS National Standards.

Several questions detailed above may guide the decision process and extent of development. The examples of various new programs and courses may be used as a catalyst for contemplating new structures to meet state goals related to standards.

Summary

The decision to develop new programs and courses is the most difficult because it requires more time, input, and resources to accomplish, than does the realignment of standards. When new programs are developed, state goals must be kept clearly in sight to prevent the creation of unnecessary courses that do not meet student and community needs. FACS National Standards provide a framework for state committees to use in the development of programs and courses.

Alignment of Established State Standards with National Standards

"How does a state align its FACS standards with national standards?"

Alignment of state standards with national standards may be a simple or complex activity. At the lowest level is identification of the national standard by number after the appropriate state standard. At the next level, is the activity of reconciling standards to read and measure in a like manner. At the most complex level, this activity may involve holding focus groups of FACS professionals and others to discuss specific areas of study related to standards.

The state leadership team needs to determine the need for alignment and the level of activity desirable to accomplish the state goals. Considerations are:

- Do the state standards, programs, and curriculum reflect goals for the next three to five years?
- How closely matched are the state and national standards for related areas of study?
- Do the state standards reflect the national content standards and competencies?
- Does the state desire to add academic proficiencies to current state standards?
- Does the state currently utilize a process approach?
- Does the state need to establish measurements?

These questions may provide a decision process for determining whether to align or revise state standards to move toward new futuristic programs. If alignment is the goal, then questions may be used to determine at what level these activities need to be established.

Alignment at the First Level

Alignment may include only the basics of examining the FACS National Standards in comparison with the current state standards. Activities may include crosswalking the standards with a numbering system, or determining those national standards that may be overarching standards for a group of state standards. This activity is one that may be done by an individual and reviewed by a group or the total population of FACS educators. It may require a minimum of work, but also will produce a minimum of change. The advantages may include that it helps the state to see how in line with other states and the nation they are on the issues of content standards, competencies, and processes.

Alignment at an Intermediate Level

The next level requires examination of the FACS National Standards in comparison to state standards, with the determination to realign. Measurements may also be identified using FACS National Standards competencies and academic proficiencies to establish the criteria for state standards. For states that have established related academic standards, this is an opportunity to benchmark against those done on a valid and reliable data base across states. Those involved with process have the opportunity to compare the key questions utilized to bring learning to higher levels of thinking. This may be accomplished by an individual, with review by a group.

Alignment at a Complex Level

At this level of alignment, committees may be established to review various areas of study from the FACS National Standards in comparison with state standards, with the ultimate objective of revising state standards or potentially recommending redevelopment of certain areas. This complex level may require more time, but will produce the most ability to bring change to programs and curriculum.

State Leadership Team Activities Related to Standards Alignment

The state leadership team has to determine the level of decisions that are needed in each particular state, depending on the answers to many of the questions posed at the beginning of this section.

Summary

Alignment activities may vary for states as they determine whether to cross reference state and national standards, reconcile standards and measurement criteria, or examine by each area of study for potential state development processes. The greatest ability to cause change possibly lies with the last alternative. The state's goals, the ability to move programs and curriculum forward, and the resources available for activities may be considerations for the level of alignment activities a state chooses.

Leadership for FACS Standards Measurements and Benchmarks

"How will measurements and benchmarks affect the quality of student learning and needs?"

Assessment has many aspects in relation to students and programs. At the present, emphasis is being placed on authentic contextual methods for student assessment. The goal of assessment is to provide feedback during the process of learning, as well as to be a final indicator of what has been learned. Emphasis is on student performance using all facets of knowledge, skills, and practices in relation to specific real-life problems.

Documentation of student performance and achievement is a strong consideration both in academic and vocational-technical education. Documentation of test scores, competencies attained, and related activities is being placed in student portfolios. Letters of reference and other such indicators of performance are becoming part of this method of documentation. Norm-referenced test scores and criterion-referenced student achievement scores often are placed together in portfolios.

Vocational-technical education has for many years used competency attainment certificates and student records to provide information to employers. These may include academic, vocational-technical, and other records related to knowledge and skill attainment. Increased emphasis is being placed on credentialing by trade associations and The National Skill Standards Board. Employers want to know the capabilities of potential workers and how they have excelled elsewhere, in order to determine how successful they may be in accomplishing various jobs.

Leadership for developing FACS standards measurements and benchmarks requires exploration of several key activities:

- Examination of crosswalks for FACS academic proficiencies with state-required academic competencies and skills
- Selection of valid methods for developing quantitative and qualitative measurements
- Analysis of valid and reliable measurement criteria to be used as the basis for development of authentic contextual and traditional assessments

Crosswalks for Academic Proficiencies

"How can FACS academic proficiencies be linked to state academic requirements?"

The academic skills linking process is based on previous research and development conducted by V-TECS and implemented in states across the nation. *Linking Academic and Occupational Skill Standards* (Losh, 1997) and the V-TECS Snyder taxonomy were the tools used to establish contextual statements related to FACS National Standards.

Key reasons for linking academic proficiencies with standards and competencies are explained in the rationale. The linkage process explains activities conducted to establish the academic contextual statements for the FACS National Standards.

Rationale for Development of Contextual Statements:

- Contextual skills become tools for instructors and curriculum developers
- Statements become elements for use in the development of "real-life" scenarios and instruction
- Potential for integration with academic disciplines
- Relationship to academic credibility and even potential credit

Key Components of The Linkage Process:

- Analysis of occupations to identify technical and related academic taxonomy skills
- Development of occupationally related contextual academic statements
- Crosswalking of the state academic content standards to the taxonomy skills
- Crosswalking of occupationally related academic skills to state academic content standards

Linking academic and occupational skill standards provides a powerful tool for instructors in the development of contextual instructional materials. Linking academic content standards to national standards products brings enhanced acceptance by the academic community. Potential exists for states to participate in a series of workshops to identify the academic requirements in each state and relate these to state FACS standards as they are established.

FACS National Standards have been crosswalked with academic proficiencies using valid research instruments. The key is for states to begin to link FACS state standards with academic requirements of their states. *Linking Academic and Occupational Skill Standards* (Losh, 1997) is currently being used by 17 states involved in the Indiana Linkage Project and also is available for use by FACS. The advantages for students to use contextual learning is key to the future of education.

Measurement Development

"What processes should be considered by a state in developing measurement for FACS standards?"

Measurement criteria establishment is a state-level activity. Measurements need to be determined before assessments can be developed. Scenarios and other forms of assessment are dependent upon measurement criteria as the basis of development. Measurements should be held constant, even if the assessment application changes.

Several factors will enter into consideration in the development of state-level measurements for FACS standards:

- Identification of the cognitive or performance levels of the standard
- Review of competencies attached to each standard to determine the content to be measured for each standard
- Establishment of criteria for quantitative and qualitative measurements in relation to the content

FACS occupational areas of study may have more technical competencies than individual and family areas of study. Occupational competencies related to standards may be broad with several tasks attached to each. Separation of these tasks may be required for development of specific measurements. Individual and family areas of study may have content with complex cognitive and attitudinal mixes, making the competencies difficult to measure in a straight forward manner. Measurements may need to describe levels or degrees of observable change.

Cognitive and Performance Levels of Standards

"What are the indicators of cognitive and performance levels?"

Standards and competencies provide a variety of indicators for levels of learning and doing. Also, they provide the basis for development of measurement. Standards address what is expected, while competencies address evaluation behaviors. Each standard and competency begins with an action verb that indicates its level within the cognitive or psychomotor domain. They address higher order thinking skills levels of application, analysis, synthesis, or evaluation. As measurements are designed, they need to address the level of evaluation indicated by the competency and the standard.

Competencies as Elements for Measurement Criteria

"What components are considered when writing measurement criteria?"

The competencies are the content for measurement criteria. Each competency represents an element required to meet a standard. Competencies may be broad and, therefore, require clear definition of components in order for measurement statements to be developed. If concise measurement is desired, state teams may need to review the competencies and delineate tasks below each competency level to create items for assessment.

Qualitative and Quantitative Criteria

Quantitative measures are more easily established than qualitative measures. Quantitative measures may contain numerical or concrete criteria as benchmarks. These items translate easily into test items for traditional testing methods.

Qualitative measurements may require additional thinking as to what the expectations are in relation to the standard. Is it important to display a change of attitude from disinterest to engagement in an activity? Does the standard imply that responsibility for actions may be important? If these are the desirable results, then qualitative measurements may need to address observable behavior criteria.

Scenarios may be the method most used for assessment for standards that have qualitative measurement criteria. Qualitative measurements also may be assessed through focus group participation, performance observation, and journal writing.

Measurement Criteria for Authentic Assessment

"What are the key elements to understand related to authentic assessment?"

Authentic Assessment

Authentic assessment is being emphasized in both academic and vocational-technical content areas. The ability of students to grasp factual information in a real-life situation has moved education into offering courses with more contextual connections. As vocational-technical and academic education continue to show interest in integration, more courses are being designed as multi-disciplinary contextual models for learning. Likewise, the importance of being able to apply factual information to real-life problems has gained credibility in the past five years.

The FACS National Standards have been designed to incorporate the competencies, academic proficiencies, and process questions into scenarios addressing one or more standards.

Assessment scenarios development questions include:

- Are real-life situations being created that address content standards?
- What key questions will determine how to think about solving the problem?
- What content knowledge, skills, and practices are required to solve the problem?

What Real-Life Situations Address the Content Standards?

The key is finding real-life situations where the problem that needs to be solved relates to the content standard being addressed. Real-life situations may be drawn from a group of individuals representing the area of study and standards being addressed. For individual and family content areas of study, family members from various situations, socio-economic levels, and viewpoints may provide excellent

situations around which to build scenarios. Community groups related to various social concerns may provide other meaningful scenarios.

Business and industry representatives can provide real-life situations directly related to the standards. For example, scenarios included at the end of this section represent food service and were created by a group of restaurant managers, food service workers, and food service instructors.

Contextual situations need to be real-life and not contrived—students know the difference. Scenarios for assessment also need to fit the mores and situations that students generally encounter. Regional, geographic, diversity, and other circumstances need to be considered in determining scenarios to be used for assessment.

What are the key questions?

Key questions to assist students in thinking or reasoning about how to solve problems within scenarios may be found in the process questions column related to the content standards. The questions are grouped to assist students in thinking from the concrete to more abstract levels related to solving practical and recurring problems. Process questions are related to content standards and to the competencies as a whole.

What content knowledge, skills, and practices are required?

The competencies and academic proficiencies columns contain the knowledge, skills, and practices related to the standards. These are needed to assist in solving problems addressed in scenarios. Depending on the complexity of a scenario, the problem may be solved by using procedural knowledge and skills or through more complex reflective thinking about the problem.

Measurements Related to Scenarios

Competencies and academic proficiencies serve as the elements around which measurement criteria can be established. Measurement criteria are needed for the development of assessment scenarios. Several solutions to a scenario may be accurate, but the range of acceptance needs to be established.

Validation

Assessment scenarios may be validated in a variety of instructional settings, in geographic regions with diverse populations, and with employers and community groups, as appropriate. Several assessment scenarios for the same content standard may be required to relate to various populations and areas of a state or the nation. Validity of assessment scenarios for different regions and populations is essential.

State Leadership Team Activities Related to Measurement Development

The state leadership team may lead groups developing measurements or may review and critique the measures set for FACS areas of study. Criteria need to be established, against which the team will weigh the items for both quantitative and qualitative measurement. The state leadership team may be called upon to present the measurements to boards of education and other entities involved with state assessment.

The measures related to occupational areas of study may need to be provided to business and industry groups for their input, if they were not involved in the development process. All parties with a stake in the goals for students to attain need to be involved in establishing these goals.

Summary

Measures for the standards are a state responsibility. They are needed for the development of both traditional and authentic contextual assessments. Although qualitative measures are difficult to develop in a valid and reliable manner, they are needed for many of the areas of study related to social science contexts. Business and industry representatives need to review measurement criteria in related occupational areas to ensure acceptance and accuracy. Elements for developing the measurements are contained in the competencies and the standards. Some competencies may be divided to establish valid measurements.

Measurements become the benchmarks for the discipline, moving the entire area to higher ground or not, depending on the path chosen. Using higher order thinking skills and action levels for developing measurements maximizes student accomplishments. When expectations are high, students achieve the greatest results.

Leadership for State FACS Curriculum Development Based on Standards

"How can national and state standards be used to establish curriculum?"

During the next 10 years mini revolutions in education will be waged. The struggles between global and national criteria for what an educated individual should be able to do is expanding. International criteria affect every community as the Internet, air travel, and other means of global interaction are clearly established.

Education curriculum and programs are now being drawn from national and international agendas. Significant leaders discuss high-profile topics and provide insights into the macro scope of needs for Family and Consumer Sciences Education. Senge (1990) discusses the need for organizations to address the whole picture, not just parts. Although it is important to understand issues on a micro level, character of the organization depends on the whole.

He illustrates this point in telling the tale of three blind men who encounter an elephant. The first man said, "It's wide and rough, like a rug." The second man, holding the trunk, said, "I have the accurate description. It is a hollow pipe." The third, holding a front leg, said, "It is strong and firm, like a pillar." Senge likens the three to the heads of manufacturing, marketing, and research in many companies. Each clearly sees issues in a particular area, but none views the interactions between the three areas. The story of the elephant concludes that, "Given these men's ways of knowing they will never know an elephant" (Senge, 1990).

It is difficult to find solutions to a complex problem, divided into parts, because the leverage lies in interactions that cannot be seen by looking only at one piece (Senge, 1990). Likewise, standards cannot be used to affect only one piece of the system. Instead, standards implementation needs to affect the total discipline within the overall system of education. Otherwise, they will not precipitate meaningful change, but only superficial change.

Family and Consumer Science Education needs to examine the total value it has to statewide audiences. How are elementary, secondary, postsecondary, and adult levels viewed? How can FACS meet the needs of individuals and families in relationship to this discipline? This may require looking beyond the usual parameters of the normal programs now offered. Those involved in the discipline must look at more than one level of education to understand the place it holds at each level and beyond. If the needs of communities across the state in the areas related to FACS are not met by this discipline, individuals and families will seek other disciplines to fulfill these needs. No vacuum continues to exist long before it is filled by another force. Leadership is needed to examine the statewide needs of FACS and to determine the scope of the programs. Also, it is necessary to consider at what levels certain

offerings are appropriate, with what external disciplines or groups these programs will be offered, how and where they will be delivered, and what curriculum support is required.

Alignment of current programs and curriculum with national standards will update the status quo. For states which have not recently or completely examined curriculum, this activity must be viewed as a beginning—as the first step in looking toward the overall needs of the state community. This is where the future lies for the FACS discipline.

As the state leadership team approaches the establishment of new and revised programs and related curriculum, it will examine the findings of the state focus groups. This includes both the external and the internal discipline, needs, the capacity of the discipline to provide programs, and opportunities for future development through expanded partnerships with other agencies, businesses, and industries.

Major topics for curriculum review:

- Influence of national standards and state philosophy
- Decisions to align, develop, or purchase curriculum for new programs
- Data-based curriculum management

Directions for Programs and Curriculum

"How will national standards and state philosophy influence curriculum direction?"

National Standards

"What role will national standards play related to state curriculum?"

FACS National Standards can provide the framework on which curriculum can be built. The areas of study include content related to the discipline in an orderly set of standards and related information. Each standard is self-contained and can be transported with others into a new structure for programs and related curriculum. The content standards become the building blocks and can be arranged in varieties of structures.

The competencies and academic proficiencies provide the learner expectations which states can use as the base to determine specific measurements. The process questions provide a program delivery strategy to enhance learning skills, using the content as context. The competencies, academic proficiencies, and processes, together provide the elements to use when building authentic learning and assessments scenarios.

State Approach Related to Curriculum

"How will state approach influence curriculum decisions?"

The FACS national vision and mission statements will provide guidance for the philosophy, but the state's ideals will determine what elements will be emphasized. For example, one state may emphasize individual and family programs, and another, occupational development programs. A high degree of flexibility is built into the system in that the materials are applicable to all age levels and educational levels who need FACS content and process approaches.

Business climate at the time of program and curriculum development may play an important role, especially with occupational programs. Areas of growth in business may indicate a need for occupational programs, or it may not, depending on the requirements for workers.

Population demographics need consideration as programs are designed for rural and urban areas. The needs of a particular state's population may vary. Although the program standards may remain constant, the content and delivery may need to be custom-designed.

Overall State Education Approaches to Curriculum

Approaches to curriculum include state-driven; local autonomy; and integrated, including contextual and multi-discipline. Endorsements by state and local boards of education are frequently found to be included in activities related to curriculum.

States vary in their approach to developing frameworks or comprehensive guides. The frameworks are more frequently associated with state guidance, local autonomy, and voluntary use. Comprehensive guides include state standards and approach; instructional materials; and supplemental materials, including such items as activity packages, CD-ROMS, computer interactive lessons, individualized units of instruction, and media.

Specific State Approaches to Curriculum

Requirements for the use of specific formats and components for all disciplines to use in curriculum establishment varies by state. Criteria may be selected, but the means to develop curriculum carries a great deal of latitude.

Common approaches to curriculum include standards/competency-based, critical-science, and duty-task. The standards/competency-based approach allows for state-identified standards to be used as the basis for competency-based, content-driven curriculum. The critical-science approach is a newer perspective used by a few states as the basis for their standards core. Several academic disciplines also are adopting this approach in various degrees. The duty-task approach is not associated with occupational programs. Unlike academic areas, duties and tasks are based on business and industry standards and measurements, according to the needs within an occupational cluster.

Curriculum Decisions for Alignment, Development, or Purchase

"How will decisions be made regarding alignment of curriculum with new national standards?"

The state leadership team has options to develop new types of curriculum, purchase packages related to business curriculum, align present curriculum, or develop new frameworks.

New Types of Curriculum

"How can national standards be used to cause dynamic change in curriculum?"

The state leadership team may wish to examine new types of curriculum:

- Integrated academics and FACS
- Scenario-based
- Process-oriented
- Community and business experience-based

Development of integrated academics and FACS curriculum provides the opportunities to work together with related academic disciplines to design instructional materials that may be used jointly. FACS may provide the leadership to build this sort of multi-discipline team. The benefits include starting new types of joint instructional programs, credibility for FACS, and perhaps ability to gain academic credits for students in FACS programs.

The curriculum should be open to new types of activities, to learner expectations in both FACS and the related academic areas. Planning processes for local school teams to work together may be incorporated as part of the guide. Teacher in-service needs to be linked to curriculum for both FACS and academic instructors.

Scenario-based curriculum and instructional materials may be developed to support authentic, or real-life situations. Scenarios should be developed with business and industry, community representatives, and family members to establish truly authentic situations in relation to content standards for a specific area of study. This provides exciting new instructional materials and related activities for the classroom. Again, it is important that teacher in-service be linked to the development and usage of scenarios.

Process-oriented curriculum provides a new perspective on learning that utilizes various processes to solve problems in contextual settings. Process skills provide the learner with a means to deal with future concerns and content that may not yet be developed.

This provides a new orientation to FACS curriculum, utilizing content as the context, and process questions as the major concept being developed. In-service is essential to gain understanding and the ability to use process-oriented curriculum in a sophisticated manner.

Community- and business-based experiences provide real experiences in the community and in business. Curriculum for these experiences provides guidelines for student activities in relation to content standards. It includes potential projects, planning for work experiences, assessment activities and other guidelines. Service learning activities and cooperative education experiences are examples of community and business activities available for the classroom.

In addition, FHA/HERO activities should be coordinated through curriculum efforts to provide continuity. The co-curricular nature of FHA/HERO also links directly to instructional activities.

Curriculum Packages

"What may be considered when a state is examining curriculum packages?"

In the past few years, many curriculum packages based on the discipline have become available from commercial sources. Unlike textbooks, these may provide resource materials, curriculum guidelines, computerized individual learning packages, and other related materials.

Most recently, the food service and hospitality industries have become involved in the design and development of curriculum, modules, textbooks, teacher in-service programs, videos, and linkage activities with high-end restaurants, resorts, and hotels.

Other areas also may join this new trend, as business in the United States, Europe, and other parts of the world have done over the past century. The state leadership team may wish to consider a commercially available curriculum package, based on a set of criteria, including:

- Match of state standards and curriculum packages
- Flexibility of programs to meet various school sizes, geographic locations, and programs
- In-service and other benefits, such as credentialing

Matching of State Standards and Curriculum Packages

First, it is important to determine if the curriculum package addresses programs that are in the state's strategic plan. Is it a priority to jump-start the program or is it down the stream? Would it be beneficial to students and the state to pilot such programs? Does it fit the criteria for programs that the state wants to address? Even if not all of the criteria are met, it is useful to evaluate the benefits of moving forward with such programs earlier than expected.

Flexibility

Is the program flexible enough to meet the needs of different size schools, those in rural and urban locations, and different school programs? When curriculum packages are purchased, consideration should be given to how effective the program will be if all of the components cannot be completed within the school year.

In-service and Other Assistance

Are in-service programs part of the curriculum package? Who pays for the in-service? When is it provided? Can it be combined with other in-service? In addition to in-service, what other assistance with programs and the curriculum package is available?

Certificate Criteria

When certificates are available, are they based on completing individual standards related to competencies, the total program, or other criteria? Sometimes certificates are provided, but the criteria may vary.

New decision-making criteria may be needed in determining how to utilize these curriculum in coordination with other guidelines. Options for the same occupational programs are available and may need to be weighed by the state leadership team. More than one option may be most desirable for many states as programs take different forms in comprehensive secondary schools, area technical schools, and tech-prep articulated programs.

Curriculum Alignment

How can current curriculum be aligned with national and state standards?

- Prioritization of curriculum areas
- Technology, group work, and other activities

Organization of alignment activities may be determined by the prioritization of curriculum areas. All curriculum may not need to be aligned in one year. The priorities set for programs will assist in determining curriculum alignment needs.

If the state has not been involved in extensive curriculum development activities in the past four years, many curricula may need to be revised to reflect the new national standards and any resulting state standards established.

The question of levels of national standards versus those in state curriculum will need to be addressed. National standards are global in nature, as are competencies. Curriculum is designed, and in addressing this issue of levels, it divides into smaller elements the content standards and the competencies. In addition, academic proficiencies may need to be added.

Use of Technology, Teams, and Other Activities

Alignment is simplified through the use of technology. Computer software is available with a data base that will allow for manipulation of standards, competencies, academic skills, and measurements. This type of technology tool can reduce the time requirements to align curriculum with national and state standards.

Teams working on curriculum also will benefit from data base software that can assist in making rapid changes and allowing for flexibility. Other activities can be linked with curriculum via such a system. As education moves forward and needs to have a continuous improvement mechanism for changing standards, competencies, and related curriculum, technology will be the only tool that will allow for the rapid flexibility that will be required.

Technological Data Base for Management of Standards

As part of its effort to provide workplace standards, assessments, and competency-based information for educators, employers, and others, V-TECS has developed a software package designed to manage occupational analysis information. The FACS National Standards will be placed in the V-TECS DIRECT software, facilitating the process of realigning state standards with national standards. Also, related academic statements contained in *V-TECS Basic Essential Skills Taxonomy* (V-TECS & Snyder, 1992) are contained in V-TECS DIRECT. This, combined with other tools within the software, simplifies manipulation of the database. Further, this system provides the means for frequent updates in programs and the ability to download information to local schools.

V-TECS DIRECT enables the user to easily customize existing information, perform information entry and retrieval, and review or select specific elements in a variety of ways. Specifically, *V-TECS DIRECT* assists in the following areas:

- Organizing and reorganizing technical courses and programs
- Identifying tools, equipment, and materials for instruction
- Revising program curriculum
- Identifying academic requirements for specific occupations
- Articulating skills at the secondary and postsecondary levels
- Developing assessment instruments to assess student performance and knowledge

V-TECS DIRECT is organized into the following elements:

- Duty and task lists
- Tool, equipment, work aids lists
- Performance elements
- Enabling competencies
- Related academic skills
- Instructional elements
- Test item banks

This software has assisted teachers in identifying competencies for programs, developing duty and task lists for business and industry validation, allowing students to research various occupations, facilitating apprenticeship development, creating courses from an occupational database, and writing objectives for classes. Occupational analysis information for more than 50 occupational areas is included on the *V-TECS DIRECT* CD-ROM.

State Leadership Team Activities Related to Curriculum

The state leadership team, using input and data from focus groups and FACS groups, can determine the priorities for curriculum alignment, development, or acquisition. Curriculum with immediate potential and the greatest current support will be candidates for earliest consideration. Longer-term commitments may be made to those which require more development or support from community or business and industry groups. Teacher in-service also is provided as part of the packages from some of these associations.

It may not be as simple to design programs and curriculum for use in another occupational area. The Family and Community Service Area has coordinated standards with the National Human Services Standards, but few FACS programs exist at this time. This will require multi-agency agreements, and support of social service agencies and community-based organizations. The team may consider several combinations of activities related to curriculum development or acquisition, based on immediate and long-term needs. Decisions about utilizing a data-based management system are critical to the ability to provide a continuous improvement and update process.

Summary

The education enterprise has competition for student time and attention. As curriculum decisions are made, the whole picture should be considered before determining one course of action over another. The long-term view looks quite different from the short-term. Decision-making involves considerations of alignment, development, or purchase.

Leadership for State FACS In-Service and Pre-Service Education on Standards

"How will in-service and pre-service education be designed to incorporate FACS National Standards?"

The key to any education program is the classroom teacher and how that individual designs the instruction to be presented to students. As education moves into new dimensions where technology provides direction along with the classroom teacher, more complex methods of teaching are required.

Education theories come and go. Styles of teaching come into vogue and then disappear. Today, expectations for students are becoming increasingly important. What is to be learned? At what level of performance is the expected behavior?

Another important dimension is acquiring the knowledge and skills related to thinking and reasoning. As the knowledge base multiplies, the need to apply thinking and reasoning skills will also multiply.

The state leadership team should acknowledge teacher education as crucial. Pre-service and in-service teacher education considerations include:

- How will teacher educators be involved with the state leadership team to design the state's implementation strategies?
- How will in-service and pre-service teacher education assist with the implementation of FACS National Standards?
- How will teacher education address the various components of the standards format?
 - Use of content standards and competencies
 - Integration of academic proficiencies
 - Understanding of process questions and theory
 - Development of scenarios for authentic learning and assessment

Implementation Strategies for In-service

"How will in-service strategies make a difference to classroom implementation of standards?"

In learning what potential in-service has relative to the implementation of national and state standards, several factors related to change theory and systems may be considered:

Although change is not readily accepted by most individuals, others may seek alternatives and support change. Derrick Moul calls those who support it, the "heat seekers." The key to moving change is always to start with those who embrace change, as opposed to the "insulators" who resist it.

Change also may be dependent on how it is viewed. If external forces with certain responsibility and influence support it, more individuals will be interested in exploring the change that standards face. Even at this, if resources are not available, if the topic does not have relevance to the individual, and if the individual is not ready for change, there is little likelihood that change will take place. Fuller says that change is individual. People need to know what may change and how to go about it.

In-service will be the change mechanism when national and state standards find their way to the classroom. Teachers are busy each day with keeping students interested in the current programs and meeting current expectations. Many types of in-service will be required to change programs, expectations, and teaching strategies. Teachers will need guidance, time for developing materials, strategies, and evaluation mechanics. Resources will be crucial for significant use of standards and new strategies proposed. Meeting with other teachers to prepare interdisciplinary strategies, community programs, and an authentic scenarios approach will take time and resources. More complex approaches, including process orientation, will require lengthy in-service over a period of time.

Below are six stages for in-service related to standards. All stages may need to be considered when planning in-service education for national standards, alignment strategies, curriculum development, and other standards-related activities. The stages in such a plan may include:

- | | |
|-----------|---|
| Stage I | Awareness
Introduction to Overall Standards and Components |
| Stage II | Involvement
Involvement in state standards activities
Focus on the overall framework
Examination of the total scope
In-depth understanding of the component parts |
| Stage III | Alignment and redevelopment
Comparisons of standards
Crosswalking program standards
Crosswalking academic standards |

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Stage IV	New program development Scenario building Process orientation Multi-dimension programs
Stage V	Field testing and refinements Initiation of new methods of delivery Initiation of new programs Development of feedback for revisions
Stage VI	Refocusing Revisions Initiation of new developments

Hord and Hall (1987) suggest that innovations do not have impact until the learner has progressed to the level of involvement in developing or carrying out the activity. There must be consequences before any impact occurs. This is also a level of refinement where the teacher may make changes to enhance the ability of students to increase their achievements (Stage V).

An in-service plan may call for several elements including:

- In-service occurring over a period of time
- Increase in complexity of content
- Custom-made in-service for various districts or groups
- Team approach to in-service with state department, state leadership team, business and community representatives
- Experts to assist with specialized workshops on specific areas such as process, scenarios, and academic proficiencies
- Feedback system set for continuous improvement mode

In-service will provide the backbone for implementation of standards. Teachers will be moved gradually by stages into more complex activities associated with standards. Change theorists suggest that in most cases there are individuals who are ready to initiate change, while others are catalysts, and others just let change happen. Judging where individual teachers and districts are in the change process can provide a starting point for developing an in-service plan.

Pre-Service Education

As FACS Education majors prepare for teaching, they also need to understand the vision, mission, and standards, in relation to current and future programs. Standards activities may involve scenarios or simulations for perspective teachers to try scenario development. Involvement is the first stage of commitment.

Pre-service education may be asked to meet with teams of teachers involved in the alignment and development activities. Real-life activities are those most sought for by teachers and students.

The state leadership team may wish to develop an in-service plan and incorporate the time lines and activities needed for national standards implementation. This plan would incorporate both specific activities and broader ones.

Summary

In-service and pre-service activities related to national and state standards are crucial. Without in-depth in-service activities, little more than awareness of the standards can be accomplished. Planning needs to include progressive in-service over a period of time to provide the depth needed to make real change.

Implementation Vehicles

Introduction

After methods of delivery of standards have been considered by states, various implementation strategies will need to be established. The implementation vehicles in this section illustrate two methods of delivery that augment the standards: scenarios and FHA/HERO. Scenarios are part of the format, but are yet to be developed by states in activities related to standards. FHA/HERO, as part of the model for national standards, provides activities that will be tied to the standards. There are examples of others, such as service learning, that will play key roles in the delivery of standards.

Scenarios

Purpose

Scenarios may be used to provide authentic, contextual instructional activities. Their purpose is twofold. First, a scenario is to provide a real-life instructional setting where students will use a set of complex problem-solving skills to acquire knowledge and skills.

Second, the purpose is to provide authentic assessments to apply what has been learned to a real-life situation, with measurement criteria applied.

Components

Scenarios include background information, the problem, and the key questions. The scenario should have depth and represent all facets of the situation for review in the problem-solving activities.

Assessment scenarios need a rubric for how the measurement criteria will be applied. The measurement should establish a broad range of what is acceptable for each criteria because many answers may be useful in solving the problem. Evaluation criteria of assessment scenario solutions include a range of benchmarks, depending on the situation and problem. When technical skills are required, measurements need to be constant, regardless of the particular situation. When reflective thinking is required, a broader range of measurements may need to be established.

Development

Master scenario development usually requires in-service to gain a thorough understanding of the components and how to capture authentic real-life situations.

First, it involves working with business and industry, with community groups, with family members, and others to draw out real-life situations related to standards and content areas. Scenarios may relate to one or more standards and competencies.

Skills are needed to bring situations into focus that directly relate to standards or competencies. A situation that somewhat relates to standards, but relates more to external content, may not be useable because it would not lead to the major content being addressed. How much can a situation be altered and still be considered authentic activity?

Another component is the development of written scenarios. How much information is required? How is the situation linked to the content? Is it clearly stated? Are the problems clearly stated? Do the questions reflect the real problems and not lead to obvious conclusions?

The measurement criteria established prior to scenario development should be clearly defined. The scenario description should provide adequate information to come to conclusions that would address the measurement criteria. Certain criteria may be more specific than others, depending on the nature of the content.

Examples of FACS Scenarios

The following is a scenario for hospitality, including guidelines for related activities.

Sample Scenario for Hospitality

You are a front desk associate working the evening shift, beginning at 3:00 p.m., at the San Diego Marriott Hotel and Marina. A convention of 600 teenagers are guests at your hotel. Six guests are reporting lost keys, while a family of four is checking out and two parties are checking in. Earlier in the shift, stolen money and a missing camera were reported. The other associate scheduled to work with you has called in sick. Your supervisor has been called, but is currently unavailable.

Problem: How will you ensure the safety of your guests and their property?

Tools have been developed by Malyn-Smith and Leff to assist with activities related to scenarios. The following is a list of questions posed in relation to the hospitality scenario:

- What do I need to know?
 - Security policies
 - Customer service
 - Problem solving
 - Prioritizing
 - Conflict resolution
 - Communication
- Who needs it?
 - Associates
 - Supervisor
 - Security
 - Guest
 - Housekeeping
 - Other employees
- In what form?
 - Document, written form
 - Verbal
- What or who are my resources?
 - Supervisor
 - Other associates
 - Policies
 - Technology—security camera, computers, key machine
- How do I go about getting the information I need and the task completed?
 - Training
 - Company policy
 - Questions of someone on the worksite
 - Shadowing experience
 - Read daily evening logs
 - Interview all parties
- How should the information or results be put together and presented?
 - File written report
 - Daily log entry
 - Oral feedback
 - Guests
 - Supervisor
 - PR letter
 - Evaluate and possibly revise policy
- How do we know the activity was successful?
 - We know activities are successful if we have resolved the problems of the lost keys and missing camera, and the guests were registered. Further tracking for reduced incidents also will demonstrate resolution.
- What supplies are required to conduct the scenario?
 - Example of policy manual
 - Example of daily log
 - Example of work schedule
 - Example of chain of command (organizational chart)
 - Examples of PR letters and letters of policy
- What resources are needed to conduct the scenario?
 - Policy manual
 - Job descriptions
- What are established links with employers?
 - Witness job responsibilities
 - Tour hotel and see scope of jobs and responsibilities

Scenarios can be developed for every type of content area. Every standard and competency should have a real-life application in some form, either singularly or collectively.

In-service may be required to provide quality scenarios, however, with practice they can be developed by most individuals. The key is finding real-life situations that fit the content being learned. Assessment should be crafted to clearly address the elements of content and processes that assist in developing solutions.

A set of scenarios were developed with a group of food production and services personnel. The scenarios are associated with a specific standard and related competencies. The food service personnel includes a five-star restaurant manager, a coffee shop owner, a human resources director for a resort facility, a food and beverage manager, a chef, a food service instructor, and an educator. Several of these scenarios are included as samples. Each could be expanded by developing the questions as illustrated.

Sample Scenarios for Food Production and Services

You have been involved in a food preparation course during the past year and worked for a caterer during the summer. You would like to start your own catering business. Your boss has tried to discourage you because of the long hours involved in this business. She says there is more opportunity if you continue school and become a chef.

What questions do you need to answer to gain a more complete perspective on food preparation careers, including owning a catering business? What personal factors may influence your career choice? What kind of education and experience will be helpful with your career choice?

A group of young people come to a prom night celebration at an upscale resort property dining room. They order an inexpensive entree and request that it be divided. Julie, the server, rolls her eyes, shakes her head and departs. The server, has "qualified" the table as a "low" or "no tip" table.

What should be the attitude of the server toward the guests? What may be the consequence of the server's actions?

A large group without reservations has entered the dining room of a moderately priced chain restaurant. Two of the guests are in wheelchairs and there is a need to move tables and chairs to accommodate this group.

As the greeter, what are your responsibilities to help this group feel welcome? How can you involve other staff to accommodate this group?

The baker has assigned you to make rolls for 400 people for a banquet this evening. You are asked to use a "rounder" to complete this task. You find the "rounder" is not working.

What are your alternatives for completing the task of making rolls? Is there other equipment to assist with making rolls? How would you clean and store this equipment?

An outdoor buffet has been prepared for service at 6:00 p.m. The temperature at 5:45 p.m. is 78 degrees. You, as the banquet service manager, have just been informed that the conference will not be over until 7:00 p.m.

What should you do with the food? After the buffet is served, what should be done with leftover food items? Which foods could be safely sent to a food bank? Utilizing your knowledge of food safety, what are the consequences of foods being left outside for more than one hour?

You have been asked to prepare menus for the next week, utilizing available computerized menus. This includes dinners for two large groups who are dining on the same evening. You need to consider staples on hand, the available hotel garden produce, and preparation equipment. One group is the Irish-Polish Conference and the other is the Women's Professional Organization, for a total of 2,000 people.

What are the steps you need to follow to complete this plan and meet the needs of the hotel and customers?

You are asked to bring fresh chickens from the walk-in refrigerator to the kitchen. You notice that the chickens are unwrapped, and unwashed vegetables in paper sacks are on top of the chickens.

What are the procedures that should be followed to prevent food contamination?

You have just arrived for work on your second day in the kitchen pantry of a large restaurant. What do you do first? How do you determine your assignments?

One of the pantry chefs asks you to make five gallons of thousand island dressing. How should you proceed? While you are making the dressing, another chef yells at you to inform you that you are not doing the recipe correctly. You are immediately assigned to chop apples.

What actions should you take? What food preparation techniques are needed to prepare thousand island dressing? What knife skills are needed for chopping apples?

As the dining room supervisor, you are in charge of new staff orientation for servers, and update sessions for all dining room staff. The restaurant has recently had several complaints to the cashier and on comment cards.

What should you include in the new server orientation so that complaints will be minimized? What should you include in an update session for all dining room staff? How can you handle this?

A table of 12 has just asked for separate checks following the meal.

How can you handle this?

The restaurant is nearly full when the computer system fails. Orders cannot be electronically communicated to the kitchen, tracking of foods is not available, and checks must be processed by hand.

How will you as a server handle this situation? What are the consequences?

A customer orders a steak medium-well done. When the server delivers it, the customer requests that the server have it grilled longer. How does the server resolve this situation? When the server takes the steak back to the kitchen, the chef is upset and says the steak will be ruined if cooked longer. His standard, and that of the restaurant, for a medium-well steak has been produced.

How does the server handle both the external customer and the chef and internal staff to achieve a positive outcome? What are the possible consequences for the server? the restaurant? the customer?

Sample Scenario for Nutrition and Wellness

Chris bounded up the stairs and into the house. Hearing the blare of the TV coming from the living room, Chris went to check and found Gramps asleep in his recliner. Gramps had been sleeping a lot lately since his heart attack. Feeling hungry, Chris went into the kitchen and spotted the following note from Mom on the counter.

Chris:

I've been called away on a business emergency for the next three days. There's plenty of food in the refrigerator for tonight—but you'll have to buy groceries and prepare meals. I've left money in an envelope in the silverware drawer. Don't forget Dad's allergies to tomatoes.

Remember Jess has a swim meet Thursday.

I hope your U.S. History test goes well. I'm glad I can count on you!!!

Love you very much!

Mom

Problem: What steps will Chris need to take to care for the family while his mother is away?

Scenarios are implementation tools that have merit, and states may wish to further explore them. Scenarios are a fairly new method of instruction and assessment that brings reality into the learner's environment. Authentic situations are used as a means to assist students in applying knowledge and skills to problems to be solved. Scenarios are structured to provide a complex situation which requires a series of problem-solving processes to propose possible solutions. Scenarios can be developed for any instructional area, but need to be established with the assistance of business representatives, community representatives, or family members to establish situations that relate to specific content standards.

Implementing the National Standards Through FHA/HERO

Future Homemakers of America (FHA/HERO) is the national student organization that serves and supports Family and Consumer Sciences Education. At the heart of FHA/HERO is student involvement in projects and activities they are responsible for planning, implementing, and evaluating. These projects create ideal opportunities for students to develop and apply Family and Consumer Sciences Education competencies and processes while demonstrating mastery of FACS National Standards. "End products" of FHA/HERO projects include portfolios, project reports, and skills demonstrations. These "end products" offer relevant, authentic means to enhance and to assess student learning.

Through FHA/HERO involvement students clarify thoughts; plan activities; analyze situations; set goals; interact with others; apply classroom knowledge; and become leaders in today's—and tomorrow's—families, careers, and communities. In the local school, chapter projects and activities stem from and enhance Family and Consumer Sciences Education programs of study. Many of these experiences occur during class time, while others may occur out of class.

The following table crosswalks FHA/HERO National Programs with the process component of FACS National Standards.

FHA/HERO TABLE

Addressing Family and Consumer Sciences Process Skills Through FHA/HERO National Programs	Community Service	Families First	FHA/HERO Career Connection	FHA/HERO FACTS	Financial Fitness	Leaders at Work in Food Service	Power of One	STAR Events	Student Body	Leadership Roles	Fund-raising
THINKING/REASONING											
Clarify goals	x	x	x	x	x	x	x	x	x	x	x
Establish standards				•			•	x		•	•
Clarify contextual information	x	x	x	x	x	x	x	x	x		
Identify or create alternative actions	x	x	x	x	x	x	x	x	x	x	x
Evaluate consequences	x	x	x	x	x	x	x	x	x	x	x
Make a judgment	•	•	x	•	•	•	x	x	•	•	
COMMUNICATION/INTERPERSONAL RELATIONSHIPS											
Listen	x	x	x	x	x	x	•	•	x	x	•
Speak	x	x	x	x	x	x	x	x	x	x	•
Be sensitive to others	x	•	•	•	•	•	•	•	•	x	•
General	x	x	x	x	x	x	x	x	x	x	x
LEADERSHIP											
Set vision/goal	x	x	x	x	x	x	x	x	x	x	x
Relate to group members	x	x	x	x	x	x	•	•	x	x	•
Achieve goals	x	x	x	x	x	x	x	x	x	x	x
Use multiple leadership strategies	•	•	•	•	•	x	•	•	•	x	•
MANAGEMENT											
Set goal	x	x	x	x	x	x	x	x	x	x	x
Plan	x	x	x	x	x	x	x	x	x	x	x
Implement	x	x	x	x	x	x	x	x	x	x	x
Evaluate	x	x	x	x	x	x	x	x	x	x	x

- x Use of process skill inherent in all or nearly all aspects of program.
 • Use of process skill often included in one or more aspects of program

Summary

Vehicles for implementation may involve many forms. Two such vehicles are scenarios and FHA/HERO. Each has a role, either in the FACS Education National Standards model or the format. Both require partial assembly with other components provided before use.

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REFERENCES

REFERENCES

Listed below are the materials contributed by states and identified by individuals as those used in the development of this document. State materials are grouped and alphabetized by contributing state. Process references and additional resources follow as a separate list, alphabetized by author. Resources beyond these may have been used also.

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